

**Drafting and Design Presentation Standards Manual
Volume 1 - Chapter 4: Right of Way**

February 2014

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Contents

4.1 Introduction	1
4.1.1 Purpose.....	1
4.1.2 Scope.....	1
4.1.3 Terminology.....	1
4.2 Resumptions	1
4.2.1 Introduction.....	1
4.2.2 General.....	2
4.2.3 Fixing resumption requirements.....	3
4.2.4 Preparation of resumption drawings.....	5
4.2.5 Limitation of access considerations.....	36
4.2.6 Native Title considerations.....	36
4.3 Native Title	36
4.3.1 General.....	36
4.3.2 Determining areas affected.....	37
4.3.3 Preparation of Native Title drawings.....	38
4.4 Limited access	43
4.4.1 General.....	43
4.4.2 Terminology.....	44
4.4.3 Preparation of limited access plans.....	45
4.4.4 Additional requirements.....	53
4.5 Road declaration	54
4.5.1 General.....	54
4.5.2 Reasons for a road declaration.....	54
4.5.3 Road declaration process overview.....	55
4.5.4 Road declaration plan preparation.....	66
Appendix 4A: Guide to Autocad hatch patterns for resumption drawings	68
Appendix 4B: Guide to Autocad hatch patterns for Native Title drawings	70
Appendix 4C: Guide to Autocad hatch patterns for limited access drawings	72
Appendix 4D: Guide to MapInfo patterns for road declaration plans	74
Appendix 4E: List of abbreviations used in land and mining tenures	75
Appendix 4F: List of limited access state-controlled roads (as at October 2013)	78

Tables

Table 4.2.4.3(a) - Resumption line chord lengths.....	15
Table 4 2.4.3(b) - Truncations.....	16
Table 4 2.4.3(a) - Urban areas.....	19
Table 4 2.4.3(b) - Rural areas.....	19

Figures

Figure 4.2.4.2(a) - Resumption drawing – Rural 7

Figure 4.2.4.2(b) - Resumption drawing – Urban..... 8

Figure 4.2.4.2(c) - Resumption drawing – Lithograph..... 9

Figure 4.2.4.3(a) - Truncations..... 16

Figure 4.2.4.3(b) - Resumptions in urban areas 17

Figure 4.2.4.3(a) - Resumption drawing - one lot on two drawings (1 of 2)..... 20

Figure 4.2.4.3(b) - Resumption drawing - one lot on two drawings (2 of 2)..... 21

Figure 4.2.4.3(c) - Resumption drawing - Easement 25

Figure 4.2.4.3(d) - Resumption drawing - Severance 26

Figure 4.2.4.3(e) - Resumption drawing - Incidental Areas..... 27

Figure 4.2.4.3(f) - Resumption drawing - Volumetric Requirements (Soil Nailing) 28

Figure 4.2.4.3(g) - Resumption drawing - Volumetric Requirements (Bridge)..... 29

Figure 4.2.4.4 - Resumption drawing - Common Area..... 32

Figure 4.3.3.4(a) - Native Title drawings associated with resumption 41

Figure 4.3.3.4(b) - Other Native Title drawings 42

Figure 4.4.3.3(a) - Limited access drawing – Permitted..... 48

Figure 4.4.3.3(b) - Limited access drawing – Provided..... 49

Figure 4.4.3.3(c) - Limited access plan – Motorway 51

Figure 4.5.3.3(a) - Line based road declaration example 57

Figure 4.5.3.3(b) - Line based road declaration example 58

Figure 4.5.3.3(c) - Line based common area example 59

Figure 4.5.3.3(d) - Area based example..... 60

Figure 4.5.3.3(e) - Area based example..... 61

Figure 4.5.3.3(f) - Future state-controlled road example..... 62

Figure 4.5.3.3(g) - Common area survey plan (sheet 1 of 2)..... 63

Figure 4.5.3.3(h) - Common area survey plan (sheet 2 of 2)..... 64

Figure 4.5.3.3(i) - ARMIS reference point plan..... 65

4.1 Introduction

4.1.1 Purpose

A Right of Way is the State of Queensland (Department of Transport and Main Roads (TMR)) obligation to acquire, affect interests or apply access limitation over a property for transportation purposes to and from another property.

This section outlines the department's Drafting and Design Presentation Standards for the production of all Right of Way (ROW) drawings. The resultant ROW will ensure all property issues will be finalised eg. Resumptions, Native Title, Limited Access, and Road Declaration.

4.1.2 Scope

This section describes the different products and provides guidelines to assist in defining requirements when producing ROW drawings.

4.1.3 Terminology

Resumptions

These are required whenever the taking of land is involved. A resumption drawing must be submitted in order to authorise the setting aside of land as road.

Native Title

These drawings are prepared to assist in the process of notification, consultation and statutory These (LA) drawings show permitted road access locations to a limited access state-controlled road or to land which is intended to become a limited access state-controlled road and are prepared as part of road-specific access policies.

Road declaration

These drawings are compiled using the latest cadastral and best alignment information available so as to ensure the location of the road being identified is clear and concise.

4.2 Resumptions

4.2.1 Introduction

The State of Queensland's responsibility to provide a better and safer transport network sometimes means that privately owned land must be acquired by the department for construction purposes.

The *Acquisition of Land Act* sets out the process for the acquisition of interests in land.

Some aspects of the acquisition process can be complex and district designers should consult the department's Property Officers when they are choosing alignments for new schemes. Property Officers can provide comment on likely impacts to and compensation payable concerning to particular corridors and properties thereon. They can also provide estimates for comparison purposes on a number of alignments.

If a property is affected by proposed works, district designers prepare a drawing showing the approximate location and area of the land required, together with background information on the resumption scheme.

When the district/regional director completes the Land Resumption Request form (M695), district staff should prepare a letter of intent to the land owner, enclosing a copy of the drawing and background information. The letter will also inform the owner he/she has a choice of either completing an

Agreement for the Taking of Land form, or receiving a Notice of Intention to Resume. (Completion of an Agreement simply expedites the acquisition process. So long as all parties with an interest in the land sign a form. They waive their rights to object to the proposed resumption.) Their right to claim compensation is the same in either case.

Letters of intent, where possible, should be hand delivered by design and/or engineering staff. Property Officers are available to attend these meetings with owners. Design and/or engineering staff can talk to design aspects. Property Officers are best equipped to handle owner enquiries regarding the acquisition and compensation process.

The Notice of Intention to Resume will outline the procedure to follow if an owner wishes to object. The objection must be in writing, be made within the time specified in the Notice, state their grounds for objection (with supporting details) and state whether they wish to be heard in support of the objection. They may appear by themselves at the objection hearing and/or be represented by a solicitor or other agent. Matters relating to the amount of compensation to be paid are not grounds for objection.

All objections, if any, are considered. The delegated officer then prepares an Objection Hearing Report as soon as possible after the hearing. He makes a recommendation to proceed, to discontinue or to proceed to acquire an amended (reduced) area. If the delegated officer recommends a change of alignment, the district must recommence the process. The district officer forwards a copy of the Objection Hearing Report to all objectors, allowing them 14 days to make further submissions.

The district then forwards the Objection Hearing Report and any further submissions, together with Decision Following Objection Hearing form (M709), to Strategic Property Management section as soon as possible after the expiry of the 14 days, to allow processing for the Minister to apply to the Governor in Council to have a notice published in the Government Gazette formally taking the land.

From the date of gazettal the land becomes the property of the State and the owner's interest in the land is converted to a right to claim compensation.

If you wish clarification of any of the above points, do not hesitate to contact a Property Officer in Strategic Property Management section.

4.2.2 General

As part of the planning and preliminary design phase, the right of way requirements for the proposed roadway needs to be taken into account. This may involve the resumption of property or parts of a property and needs to be shown on the design drawings.

Resumption drawings are prepared to assist in the acquisition of land by:

- identifying the boundaries of the land to be acquired and to provide survey information to assist with the correction of Title
- showing the areas of all land parcels affected, including balance and severance areas etc, and
- assisting property owners to identify the extent of land required and improvements affected.

Resumption drawings must show clearly and precisely the following details:

- area to be resumed, and
- the exact details of the requirement.

There are a few acceptable methods for showing proposed new property boundaries as a result of land acquisition.

4.2.3 Fixing resumption requirements

This section deals with the fixing of property requirements suitable for cadastral surveyors to peg the requirement on the ground.

4.2.3.1 Resumption of small areas

During the detailed planning process, the designer usually considers resumption only from the point of view of avoiding very small areas and/or resumption on both sides of an existing road.

When a resumption of a small truncation or sliver area is proposed, the designer should carefully reassess the requirements which make the resumption necessary while being aware that a considerable cost is incurred in internal resources and external administration, excluding any compensation payment.

4.2.3.2 Considerations in determining resumption boundaries

The designer determines the initial position of the proposed resumption from consideration of the road reservation requirements. The relative importance of any one of these may vary with the district concerned, the job and the locality. The requirements may cover the following features:

- the width required by the completed earthworks, i.e. the extent of the batter points
- the clearance from the batter points. For details of the widths to be adopted refer current policy statement on ROW Widths
- sediment filter dams for road surface runoff and any other environmental protection structure, if relevant
- provision for further development including widening, channelisation and/or additional lanes, including truncations, to suit road improvements not included in the present scheme
- an access zone for maintenance vehicles (e.g. culvert maintenance, mowing of fill batters, maintenance of collector drains from catch banks and table drains, etc.)
- constructability and future upgrading/maintenance issues, e.g. the provision of side tracks for traffic management
- possible future road upgrades, e.g. duplication, adding an overtaking lane, driver fatigue pull over rest areas, and so on
- the provision of clear zones for errant vehicles
- provision of accesses to properties in difficult terrain
- the relocation of Public Utility Plant (PUP) and the long term maintenance of this plant (it's difficult to keep PUP out of the road corridor)
- sight distance requirements on horizontal curves and at side and cross-road intersections
- service roads
- parking strips
- footpaths
- access conditions
- sedimentation basins

- drainage outlet considerations
- accident containment zones (for the majority of accidents), and
- location of improvements.

Remember that a saw-tooth resumption line is difficult to fence and the use of longer even chords/lines aids fencing and also provides regular property boundaries.

In urban areas the ROW clearance needs to include appropriate:

- footpath widths
- clearances to buildings
- provision for difficult accesses with safety.

ROW considerations in urban areas are driven by the cost of resumptions (land, buildings, businesses).

Once land is taken, even for small 'snippets', a claim could arise with respect to land value and injurious affection and severance damage could apply.

4.2.3.3 Method of fixing land requirements

After the horizontal and vertical alignments are fixed, the land requirements can be determined from using a plot of the proposed road batter points or batter points plus the required clearance but in situations where batters are quite irregular an additional requirement of a minimum clear zone distance from the shoulder will be of advantage to ensure a more regular resumption line.

In all cases after fixing the minimum requirements the proposed resumption should be adjusted to form a smooth line of straights and chords (see Table 4.2.4.3(a)).

Generally, in rural areas, the preliminary designed widths of road reservation are rounded to the next even five metres above the actual designed total, but this may vary with the District concerned. The rounding is usually done when the land to be resumed is of low value and/or no improvements of any value are involved. However, in areas of low earthworks and/or low value of land a regular width resumption should be taken for the sake of uniformity and simplicity. In urban areas or any areas of high cost land, the land taken should be the designed requirement plus approved clearances.

4.2.3.4 Ambulatory boundaries

Ambulatory boundary is either the high or low bank of a water way (creek/river). Surveyors, Designers and Property Officers need to be aware of the potential for a problem/complication to exist at creek/river crossings and its potential to impact on the resumption process.

In the case of ambulatory boundaries it is recommended that the cadastral reinstatement of the ambulatory boundary is performed prior to the gazettal of the resumption drawings.

The location of the alignment of the resumption where it intersects the ambulatory boundary is needed to instruct the cadastral surveyor.

The final position of the ambulatory boundary has to be determined to be able to calculate intended resumption areas.

4.2.3.5 Access Restriction Strips (ARS)

When an existing ARS, i.e. a narrow strip of land held in fee simple by the Local Authority, exists along the road frontage where a resumption is proposed then the Local Authority should be consulted as to whether or not the ARS is to be reinstated along the proposed resumption boundary.

Where the Local Authority requires an existing ARS to be reinstated along the proposed resumption boundary as part of the resumption process, an additional like area to that of the existing strip should be allowed for in the total resumption area.

The Manager (Property Services) must be advised of the need to reinstate the ARS along the proposed resumption boundary.

4.2.3.6 Severances

Another aspect of property acquisition concerns the taking or non-taking of severances. Where a new road leaves small severances it is almost impossible to decide what land should be taken unless the owners of the various parcels of land are known. Where affected adjoining lots are in common ownership, problems of access to severed areas may not arise. However, if the severances were in different ownership, land may have to be taken by reason of its small size and/or absence of access. Therefore, precise information on ownership is essential in such cases. The point still arises that no mandate exists to take more land than is required for road works unless the owner is agreeable to such taking.

4.2.4 Preparation of resumption drawings

Resumption drawings are prepared to identify and detail the requirements of land to be acquired.

Three main aspects are involved are:

- to provide the cadastral surveyor with sufficient information to survey the boundaries of the resumed land
- to enable the property owner to readily identify with certainty the land to be resumed, and
- to show all relevant information for assessment of compensation by the assessing agency.

Resumption drawings are required whenever the taking of land is involved, irrespective of the tenure thereof, including taking the whole title and including requirements from reserves and Unallocated State Land. This statement also applies to land held in fee simple by the director general of the Queensland Department of Transport and Main Roads. In other words, unless the land on which the works are to be carried out is already dedicated road, a Form M695 and a resumption drawing must be submitted in order to authorise the setting aside of the land as road.

4.2.4.1 Types of resumption drawings

There are two types of resumption drawings that are likely to be required and they are as follows:

- ***Standard resumption drawings***

In rural and urban areas resumption drawings can generally be produced from the normal working feature drawings on which the boundaries are normally shown in red, provided these boundaries are plotted using registered survey plans (see Figure 4.2.4.2(a) and Figure 4.2.4.2(b)). Standard resumption drawings usually detail the requirements for areas to be resumed in a single plane, however there are some situations where the resumption of a volumetric area is required. The requirements for the preparation and presentation of drawings

that include volumetric resumptions are identical to standard resumption drawings, except for some additional information that is required to set-out the area in three dimensions instead of two (see Figure 4.2.4.3(g) and Figure 4.2.4.4).

- ***Lithographs***

In rural areas where the resumption is mainly through holdings, this type of resumption drawing may be shown by means of an accurately marked alignment on a lithograph, on which reference to the working drawing numbers is to be made (see Figure 4.2.4.2(c)). Note that this type does not include holdings through which a surveyed road reservation has already been provided.

4.2.4.2 Preparation of standard resumption drawings

Resumption drawing preparation will require a decision as to the type of drawing required (see Clause 4.2.4.1). This section will detail the procedures for the preparation of these standard resumption drawings.

Draftspersons should remember that resumption drawings will ultimately be reduced to half-size and the minimum lettering sizes will apply. Refer to Chapter 2 *General Standards*.

Number of acquisitions per resumption drawing

It is undesirable to have too many different resumptions (i.e. different properties being resumed from) on the one drawing in the event that one property is held up for negotiations or amendments. A reasonable maximum is five properties, and drawing sizes should be selected to suit. The maximum number of resumptions per drawing sheet is six.

In urban areas it is normal practice to have only one resumption drawing per drawing sheet.

Drawing reading by the layman

Anything that will assist the owner to identify the section of his property involved should be included on the drawing. For example, the owner is sure to recognise such features as a building, a driveway, a dam, a well, a gate, etc. Even if in some cases these occur on a neighbour's property, such features outside the owner's property as power poles, Reference Point (RPs) or natural features such as a creek are recognisable on the drawing.

Normally, existing tracks are omitted from a drawing but where property information is sparse, their inclusion in the absence of other details can assist the owner in identifying and locating the section involved. It is important that a north point is shown on each drawing.

Distances along property boundaries and offsets from them should be shown to aid in the approximate location of the resumption boundary. "Approx." should be used in conjunction with these distances and offsets.

Inclusion of the proposed road control line is not necessary unless it is considered desirable for discussions with property owners. If it is included it should be annotated, but details such as tangent lines produced to the intersection points are extraneous on a resumption drawing and are to be omitted.

Locality map

Where identification of the land proposed for resumption cannot readily be made, for example due to a lack of street names or well known features, it will be necessary to show a locality map on every resumption drawing and/or distances to well known points.

It is recommended that the locality map be an extract from the appropriate cadastral map scanned and inserted at as large a scale as possible to give a clear picture of the resumption location.

The locality map should include a conspicuous north point, cadastral map name and if required distances to well known features for example towns, road junctions, rivers, etc.

It should be remembered that the original resumption drawing is reduced half-size for convenient handing before issue and unless the locality map is clear and uncluttered in its natural state, it will, on reduction become unreadable and its purpose destroyed.

Where the extract from the cadastral map will not fit on the first resumption drawing, a new drawing showing the extract should be prepared, this drawing becoming number one in the series of drawings. A suitable drawing title is then required, the drawing should be registered and a cross-reference made on both drawings, one to the other.

Drawing size

Resumption drawings are to be prepared on a standard A1 size title sheet, as shown in Chapter 2 *General Standards*. Final plotted output is to be A3 size (50% reduction). From the point of view of economy of drafting it is reasonable to use a single sheet in order to cover the maximum area on the one drawing, but this can be carried to extremes and no attempt should be made to cram the drawing merely for reasons of drafting economy.

Drawing scales

The scale chosen for the drawing should enable it to be easily read after reduction. For resumptions in rural areas a scale of 1:2000 will generally be satisfactory whereas in urban areas, where land is generally freehold, a larger scale is required to enable specific clearances from buildings etc, to be

shown. The scale of the related working drawing or the design alignment drawing is a good guide to the scale required for resumption drawings.

Drafting standard

The type of drafting required on these drawings should not differ to any extent from that of the working drawing except that special emphasis is made to certain details and there are certain omissions of items unrelated to resumption matters.

Typical information required on drawings

The following information is to be accurately recorded on the drawing:

- the lot on plan method of describing properties should be shown on the drawing as follows:
 - the lot numbers and property plan numbers of properties not being resumed are to be in vertical font, 4 mm high and 0.35 mm thick.
 - the lot number of the property being resumed is to be in vertical font, 6 mm high and is to be emphasised by making figures 0.7 mm thick
 - the registered survey plan number of the property being resumed is to be in vertical font, 6 mm high and 0.35 mm thick
- The properties being resumed from are to be listed in the relevant position in the title block. These properties are to be listed in the file reference column sequentially, starting with the number one on the first drawing in the series of drawings and progressively increasing to the last property being resumed from on the last drawing of the series.
- Where a property is resumed from and the area(s) required appears on two or more resumption drawings it must be shown in the title blocks of those drawings with the same file reference number.
- Survey marks (instrument stations) should be drawn and annotated together with a table of coordinates and offset pegs, if relevant.

Annotated grids are to be shown on the drawing including a note detailing the survey datum information.

- Bench marks are to be shown.
- Reference points (RP) are to be shown on the resumption drawings where they occur.
- Rivers and large creeks are to be shown and named, and if necessary scaled from the lithograph. The direction of flow is to be indicated by a conspicuous arrow.
- Property boundary lines are to be drawn long enough to divide adjacent properties clearly.
- Vincula are to be shown where they apply.
- All land survey marks located by the surveyor are to be shown together with the coordinates of established survey marks (see Clause 4.2.4.3).
- A prominent statement should be placed on the drawing stating that only the coordinates should be used by the cadastral surveyor to locate the resumption boundary.
- For the display of survey marks and survey datum requirements refer to Volume 2 of *Drafting and Design Presentation Standards Manual*.

- Property improvements such as fences, fence posts, electricity and telecommunication lines, existing culverts etc. are to be shown where these are affected by the resumption, and where they will assist in accurately locating the extent of the resumption on the ground.
- All structural improvements on the land to be resumed, and those within close proximity (about 25 metres) of the resumption boundary, are to be shown on the drawings.
- All soil descriptions, vegetation, and cultivation details are to be given, also watering facilities such as wells, windmills, dams etc.
- Previous resumptions which have not been surveyed are to be shown. In such cases the lines of the previous resumption boundary are to be drawn in thin black broken lines with a cross-reference note in the form "See Rxx-xxxx ". This cross-reference will indicate that the resumption has already been processed by the department.

Property description

To ensure that the property information to be shown on the resumption drawing is accurate, acquire the latest Title Search and Survey Plans or use searches less than one month old. If searches indicate the ownership of a property is a company, a company search will be required. If the title search shows that the land is encumbered by a Caveat, an easement or similar dealing, then a search of such dealing will also be required.

Each parcel of land has a unique identifier known as "Lot-on-Plan". For freehold and non-freehold land the Department of Natural Resources and Water is responsible for the description and registration of the title. The unique identifier in each case is Lot on Plan, for example Lot 3 on SP80022.

Tenure of property

When land becomes alienated from the Crown it is called a Deed of Grant. When the Deed of Grant is subdivided a 'Certificate of Title' is issued to the property owners.

The Tenure of Property is to be given under each property description concerned with the resumption. These details are sufficiently well known to be abbreviated to capital letters. Typical of these would be:

AF = Agricultural Farm

USL = Unallocated State Land

RE = Reserve (including the type of reserve)

F = Freehold

A more comprehensive list is shown in Appendix 4E. The numbers of leases and agricultural farms are also to be given with the abbreviation letters used to define these tenures. A typical example would be:

Lot 17 on RP123456

AF 685

Fee simple (FS) means land totally alienated from the Crown and held subject to certificate of title or deed of grant.

North Point

The North Point must be drawn clear of the line work comprising the resumption drawing to reduce the chance of confusion with a boundary line.

Easements

Where an easement appears on a drawing, full details of that easement are to be given. Where the resumption involves that easement then the drawing must show separate and combined areas to be resumed and the respective balance areas (see Clause 4.2.4.3- Showing Easement Areas Required).

Reservations in Title

A Reservation in Title is an area, attached to an Estate in Fee Simple.

It is set aside for road which will benefit the community as a whole, i.e. a Reservation for a Public Purpose.

While the position of the Reservation in Title is unspecified, i.e. a "Floating" Reservation, its area is known.

If a Reservation in Title exists, consideration should be given to resuming from the Reservation in Title, rather than from the Estate in Fee Simple.

Since no compensation is paid for the land, only for any improvements on the land, it should only be considered if no undue severances will be created.

To determine if a Reservation in Title exists, there will be a statement:

"For exclusions refer to Plan
XX nnnnnn",
on the Title Search.

On Plan XX nnnnnn there will be a three line area:

157.2 ha
4.1461 ha Rd Resn
153.0539 ha Bal

Any existing area reserved for road purposes contained in the land affected must be shown since the resumed area may be offset against this. Show this area beneath the area required for resumption, thus:

Lot LL on XXnnnnn
Area reqd abt 12.32 ha
(Rd Res. 4.146 ha)

Such reservation has no location within the area but is purely a reservation for future road purposes. The area to be shown as required is the total area to be resumed; it is not to be adjusted by the area of such reservation contained in the land affected. If the area required happens to be less than the area of such reservation, the full area of the latter is nevertheless to be shown.

4.2.4.3 Presentation of resumption drawings

Once the land requirements have been fixed it is necessary to complete the detailing of the resumption drawing.

Line types

Property boundaries and resumption boundaries are to be drawn using standard line styles and are to be output in red colour. Refer Chapter 2 *General Standards*.

Setting out points

The method of setting out the points which fix the proposed resumption boundaries is to be by:

- coordinates
- dimensions given from cadastral (property) boundaries
- bearings given from coordinates.

Point numbering

At each point where the resumption line starts and ends on an existing property boundary and at each point where that line changes direction, the point must be identified (by assigning it a number) and located by one of the following methods.

The numbers assigned are to be consecutive, commencing at the left hand side of the drawing. The numbers (in circles 6-7 mm diameter) are to be placed adjacent to the points to which they refer. When individual resumption occurs on both sides of the control line, the point numbers should progress on one side before continuing on the other side.

Each drawing should commence with point number one, but it is also correct to carry the numbering forward to an adjoining drawing when the same resumption area is involved.

If it is required to introduce a new number for a point which was either overlooked originally or is now required because of an amendment, the proceeding point number should be taken and the letter A added. For example, a new point to be numbered between 27 and 28 should be numbered 27A.

Dimensions

Dimensions are to be given accurate to one decimal place in metres.

To help the property owner understand the extent of the area being considered for transport purposes some dimensions are to be shown on the resumption drawing.

A note is to be shown on the drawing to indicate that these dimensions are provided for information only.

“Dimensions shown are approximate and for information only. Dimensions are not to be used for setting out resumption boundaries”.

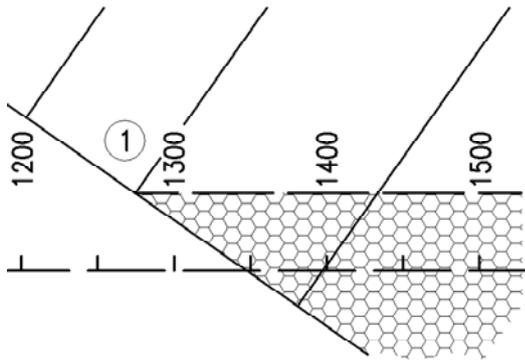
New boundary points

The following particular rules are to be observed with the wording of boundary points:

- when the resumption line starts from or ends on a surveyed corner, it is uncertain just precisely what the coordinate is.

NEW BOUNDARY POINTS

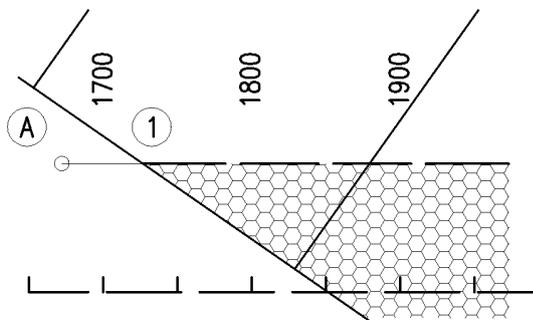
POINT No.	CO-ORDINATES		REMARKS
	EASTING	NORTHING	
1	-	-	ON CORNER
2	-	-	ON BDY ON LINE 1-4



When the resumption line starts from or ends on a surveyed boundary as distinct from a corner, the description is to read.

NEW BOUNDARY POINTS

POINT No.	CO-ORDINATES		REMARKS
	EASTING	NORTHING	
1	-	-	ON BODY LINE A-4
2	-	-	ON BODY ON LINE A-4



(Note: here that we need a Setout Point that is on a projection of the required new road boundary).

Resumption on curves

Where the resumption line is around a curve it will be in the form of chords. Table 4.2.4.3(a) serves as a guide to the general maximum chord lengths for fence strainer post spacing applicable to the radii shown. The chords commonly start and end opposite the curve tangent points, but in the case of transitioned curves the designer may carry the straight resumption line up to half way along the spiral length before introducing the first chord. The point numbers at the chord intersections are treated as described in Clause 4.2.4.3.

Table 4.2.4.3(a) - Resumption line chord lengths

Strainer Post Spacing not exceeding 150 m		Strainer Post Spacing not exceeding 100 m (black soil)	
Radius m	Chord length, m	Radius m	Chord length, m
120 - 180	60	120 - 270	60
180 - 270	75	270 - 1100	90
270 - 750	90	1100 - 2400	180
750 - 3000	150	>2400	270
>3000	300		

Truncations

Where the resumption line is around intersecting roads there is a minimum length of cord to provide an acceptable offset, say 0.5 m. Cord lengths must be at least 2 m. The first deflection angle must be at least 30. Table 4.2.4.3(a) provides guidance to the number of chords at intersections.

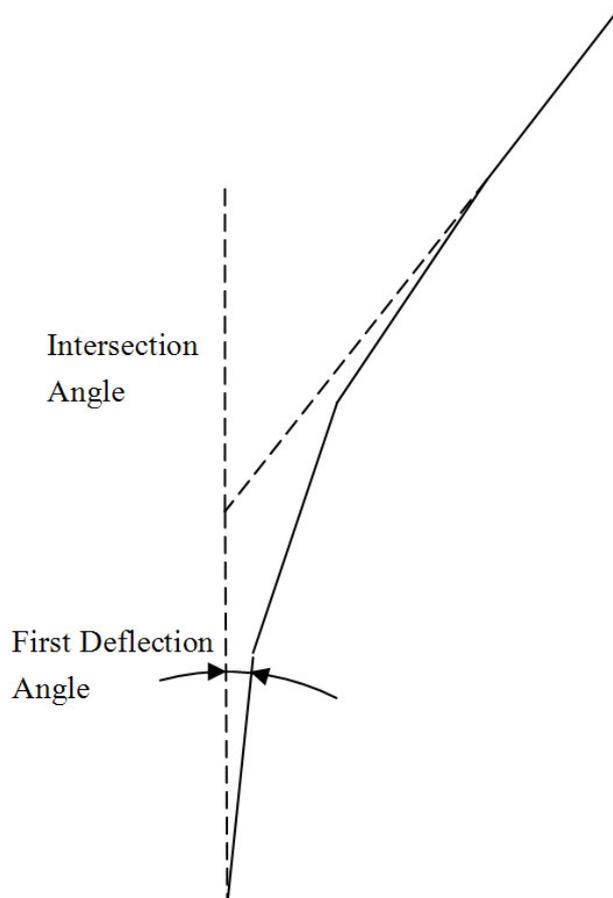
Figure 4.2.4.3(b) shows the general layout.

Table 4 2.4.3(b) - Truncations

Truncation Length (m)	Number of Chords	Intersection Angle	Chord Length (m)	First Deflection Angle
6	1	6°	11.984	3°
6	2	12°	5.975	3°
6	3	18°	3.965	3°
6	3	132°	2.001	-
6	2	133°	2.861	-
6	2	149°	2.014	-
6	1	150°	3.106	-

For angles ≤ 90 deg – the truncation length will be 6 m, have 3 chords with a minimum chord length of 2 m. For angles > 90 deg – have 3 chords with a minimum chord length of 4-5 m (the design footprint would be a good guide for the new boundary line, with the designer always considering a smooth boundary alignment).

Figure 4.2.4.3(a) - Truncations



Fixing resumptions using coordinates

A tabulation of point numbers and coordinates is to be given on the drawing together with the coordinates and type of surveyed marks and a note detailing the datum for the survey so that the cadastral surveyor can establish a base for his work. However, coordinates are not to be used to identify points on property boundaries, as there is no guarantee that the coordinates actually fall on the boundary. A point on a boundary can only be located by a cadastral surveyor using a specified setting out line that crosses the boundary.

Where a resumption boundary ends on a property corner a notation should be shown on the resumption boundary stating that the resumption boundary joins to the property corner.

Where a resumption boundary ends on a property boundary the bearing of the resumption boundary could be shown from a known point.

Where a resumption boundary is straight and intersects one or more property boundaries a notation should be shown on the resumption boundary stating that the intersection points lie on the resumption boundary between the end points.

A minimum of three marks are required to establish a base for survey work. These marks should be selected for ease of location and to give full coverage of the job.

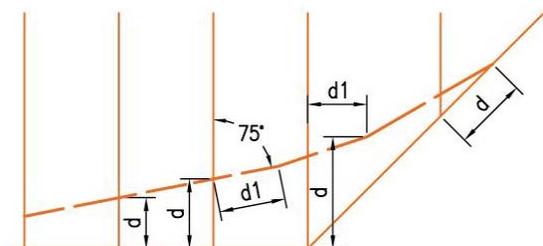
Survey marks in order of ease of location are:

- permanent survey marks and bench marks
- screws, ramsets and nails in concrete
- spike and nails in bitumen, and
- pegs and steel offset pegs.

Fixing resumptions using existing property boundaries

In urban areas, or any area where subdivision has been carried out, proposed resumption boundaries may be related to the existing property boundaries, with distances measured along the boundaries. Cadastral boundaries must be adjusted to existing survey marks. If the angle in the resumption line is not on a boundary, the angle point is then “tied” to an adjacent corner by a line at a given angle (approx.) to a suitable boundary and at a distance from that corner. (Give an angle not a bearing for such a tie line). Alternatively, a distance from a corner, measured along a boundary, combined with a square offset will adequately define the point (see Figure 4.2.4.3(b)).

Figure 4 2.4.3(b) - Resumptions in urban areas



(Note: Digital Cadastral Data Base boundaries may be used as a reference only i.e. not to be used for fixing resumption boundaries.)

Fixing resumptions using a setting out line

In situations where the line of the proposed resumption boundary is known then it is best to locate this line by coordinate system. The intersection of this line with the actual property boundaries locates the resumption boundary (see Figure 4.2.4.3(d)). Points A and C are located by coordinates with the proposed resumption line being defined by the intersection of the fixed line with the actual property boundaries.

Fixing resumptions from existing features/construction

In situations where it is required that a proposed resumption boundary be located in relation to a particular feature, then it is best located by dimension from that feature. Such situations could be to include a power pole from inside a property or to fix a resumption boundary relative to a road edge, culvert, etc.

Future works

Where the resumed area makes provision for future works such as channelisation, widening or the like, an explanatory note should be given on the drawing or alternatively the extent of the future work should be shown in very short thin broken lines for the information of the owner.

Showing areas required

The area(s) being resumed are required to be shown in both the body of the drawing and in the location set aside for this purpose in the title block.

There are two methods of showing the areas in the body of the drawing and they are:

- under the property description to which it refers, and
- in tabular form.

The rule is also varied when there happens to be more than one parcel of land covered in the total requirements from the one property. In such a case the area of each parcel should be shown within or adjacent to the parcel concerned and the total area required stated with the property description. This is illustrated on Figures 4.2.4.3(a) and 4.2.4.3(b).

Note particularly that all areas are to be prefaced with the word “about”, contracted to “abt”. In addition, the words “area required” (“area reqd”) are to be used when stating the area. In the first instance above, the area required would be shown as:

Lot 13 on SP124578

FH

Area reqd abt 23.76 ha

Area remaining abt 146.82 ha

For volumetric resumptions, both the volume and the plan area required are to be shown under the property description to which they refer as follows:

Lot 81

SP132799\par

Volume reqd abt 14430 m³

over area abt 817m²

In the title block, the area required is shown in the standard column as normal, however the volume required is shown in the column normally used for the area remaining (see Figure 4.2.4.4). Note on

the example that column headings were customised to clarify whether the numbers specified in the column were areas remaining or volumes required.

The second method of showing the areas required would normally be adopted where space prohibits the required areas being shown with the portions or allotments to which they refer, for example in small townships and in urban areas. In such cases the areas are to be shown in tabular form as follows.

Table 4 2.4.3(a) - Urban areas

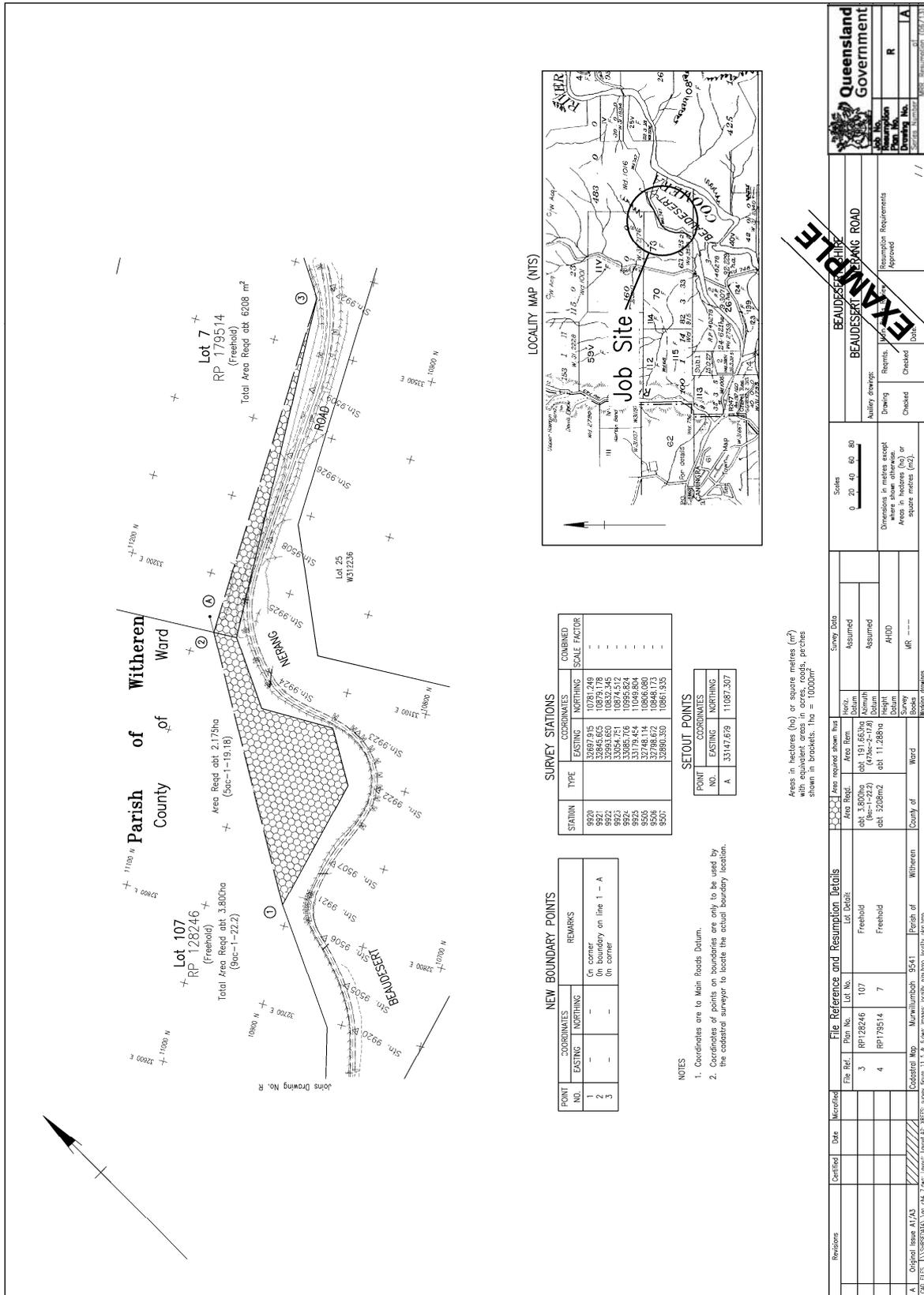
REFERENCE TO AREAS REQUIRED		
Description	Area Required	Area Remaining
Lot 1 on SP16430	abt 210m ²	abt 627m ²
Lot 7 on SP16832	abt 156m ²	abt 779m ²
Lot 8 on SP16832	abt 123m ²	abt 683m ²
Lot 2 on SP16986	abt 34m ²	abt 1088m ²

An alternative table for a rural situation, where drawing detail prohibits the showing of areas required under the property description, is as follows.

Table 4 2.4.3(b) - Rural areas

REFERENCE TO AREAS REQUIRED		
Description	Area Required	Area Remaining
Lot 2 on SP17890	abt 1.163 ha (8590m ² , road; 3040 m FS#	abt 29.362 ha road; 456 m ² FS#
# Fee Simple see Clause 4.1.4.2.		

Figure 4.2.4.3(b) - Resumption drawing - one lot on two drawings (2 of 2)



Areas required are to be given using the following rules:

- if the Deed Area is in imperial units - give the areas in both metric and imperial for example 1.76 ha (4 ac – 1 - 15.8); 283 m² (0 ac – 0 - 11.2)
- if the Title Deed is in metric units - give the metric area
- Areas 1 ha and over - give in ha
- Metric areas are to be given correct to four significant digits except for areas less than 100 m² which are to be given to one decimal place. for example 2376 ha, 237.6 ha, 23.76 ha, 2.376 ha, 2376 m², 237.6 m², 23.8 m², 2.4 m²
- all volumes are to be given in metric units - cubic metres (m³) - round upwards to the nearest whole number
- amend (to suit the situation) the following drawing note, to be placed in a conspicuous position in or near the title block.

Dimensions in metres except where shown otherwise. Areas in hectares (ha) or square metres (m²) with equivalent areas in acres, roods, perches shown in brackets.

CONVERSION OF AREAS METRIC to IMPERIAL	
10000m ²	= 1 ha
1 ha	= 2.47105 acres
1 acre	= 4 roods
1 rood	= 40 perches
1 perch	= (16.5 x 0.3048) ² = m ²
For example	
5.106 ha	= 12.617 acres (12 acres)
0.617 acres	= 2.469 roods (2 roods)
0.469 roods	= 18.8 perches (18.8 perches)
5.106 ha	= (12ac – 2 – 18.8)

Where the resumption through a parcel of land is continued on an adjoining drawing (a practice which should be avoided if at all possible) the area required should be shown firstly adjacent to or in the relevant area required or up to/from a particular chainage where the individual area required is actually shown on separate resumption drawings. The total area to be resumed must be shown on each drawing together with a reference to the preceding or succeeding drawing (see Figure 4.2.4.3(b) and Figure 4.2.4.3(c).

Property requirement

With whole property requirements the resumption drawing is to show the exact area shown on the current Survey Plan.

Showing areas remaining

When dealing with resumptions the area remaining is to be given in all cases. The area should be the result of subtracting the area required from the Deed Area and shown with the resumption area in the relevant position in the title block. This is illustrated in Figure 4.2.4.2(a).

Areas remaining are to be given using the rules for showing areas required (see *Showing Areas Required*).

Showing easement areas required

Where the resumption includes land covered by an easement the drawing must show separate and combined areas to be resumed and the respective balance areas (see Figure 4.2.4.3(d)).

Severances

Areas of severances must be shown since these have a bearing on the valuation. It is normal to show the area within the severance if this is possible, or if space does not permit this, adjacent to it, for example:

Severance area abt 6.955 ha

This type of severance is illustrated in Figure 4.2.4.3(e). Cases arise where the severed portion of land is of no practical use to the owner or in urban areas the severance area is substandard by local government bylaws and cannot be amalgamated with adjoining blocks by the common owner. In such cases the severed portion may also be resumed at the owner's request. Both areas are then shown on the resumption drawing, that is, the area taken for road purposes and the severance area, not required for road purposes, taken in fee simple, for example:

Area reqd abt 1.163 m²
(8590 m² road, 3040 m² FS#)

Fee Simple see Clause 4.2.4.2

Curtilage areas

If the proposed resumption line passes through a structural improvement, additional land will need to be made available to enable the structure to be removed clear of the proposed road reserve. This land is resumed in Fee Simple for incidental purposes. After the structure is removed the resumption process for the curtilage area may be discontinued. If the department and the previous owner agree, the gazetted taking of land notice of resumption can be revoked and ownership of the land would revert to the previous owner.

Incidental areas

Where there is additional land required for some minor ancillary works, for example inlet / outlet drainage channel improvements which are additional to the land required to include permanent drainage structures, additional land will need to be made available to construct the works. The first preference in this case is to include all the works (including allowance for construction clearances) in an area resumed in Fee Simple.

In cases where the taking of this total land requirement unduly affects the amenity of the property, say in the case of a small parcel of land, difficulties may arise in securing the agreement of the property holder. An alternate approach may be to divide the areas into parcels. The area required for construction and maintenance of the drainage structure (including allowance for construction clearances) is resumed in Fee Simple as an area required for transport purposes. The additional land required for construction of the ancillary works is resumed in Fee Simple for incidental purposes.

In cases such as this, if it is apparent after construction of the ancillary works that the department has no further requirement for this additional land, the department and the previous owner may agree to

revoke the gazetted taking of land notice of resumption of the incidental area, and ownership of the land would revert to the previous owner. This type of resumption is illustrated in Figure 4.2.4.3(f). Note that the drainage design features shown on this figure to highlight the distinction between areas would not normally be included on the final resumption drawing.

Volumetric requirements

With instances of tunnelling, soil nailed walls and bridges, rather than proceeding with a full resumption, volumetric resumptions for Transport Purposes should be considered. With this process, in particular soil nailed walls and tunnelling, the owner of the property can retain full use of the surface area of the land (see Figure 4.2.4.3(g)). Volumetric resumptions for bridges involves resuming a three dimensional space surrounding the structure in order to release the land underneath for some continued or new use. Examples of this are when a road bridge crosses existing freehold property in the space above the ground surface and both the property owner and the department have a need for continued operation and maintenance of their respective areas (see Figure 4.2.4.4); or where volumetric resumptions could release the land underneath for potential car parking where that facility is at a premium (possibly in urban CBD areas).

The volumetric resumption should take into account any maintenance area around the structure and access for inspection and maintenance. In the bridge example shown in Figure 4.2.4.4, allowance has been made also for future road lighting poles, which were not included in the initial construction contract. Note on that example also that only a nominal clearance of 0.5 m was allowed from the underside of the deck units and the piers and piles and in this case extended to the underside of the piles (did not stop at the ground surface). This nominal clearance would not be sufficient for cases where inspection and maintenance is required from under the bridge, so in this case, it would be necessary to establish a formal right of access to this area through the establishment of an easement. Referring to Figure 4.2.4.3(g), the clearance to ground level for the end span of the bridge (between piers 10 and 11) was diminished to such an extent as to be not viable as a volumetric resumption and a full title resumption was invoked over that area.

A volumetric drawing is no different from a normal resumption drawing other than there being a 3rd dimension.

Figure 4.2.4.3(c) - Resumption drawing - Easement

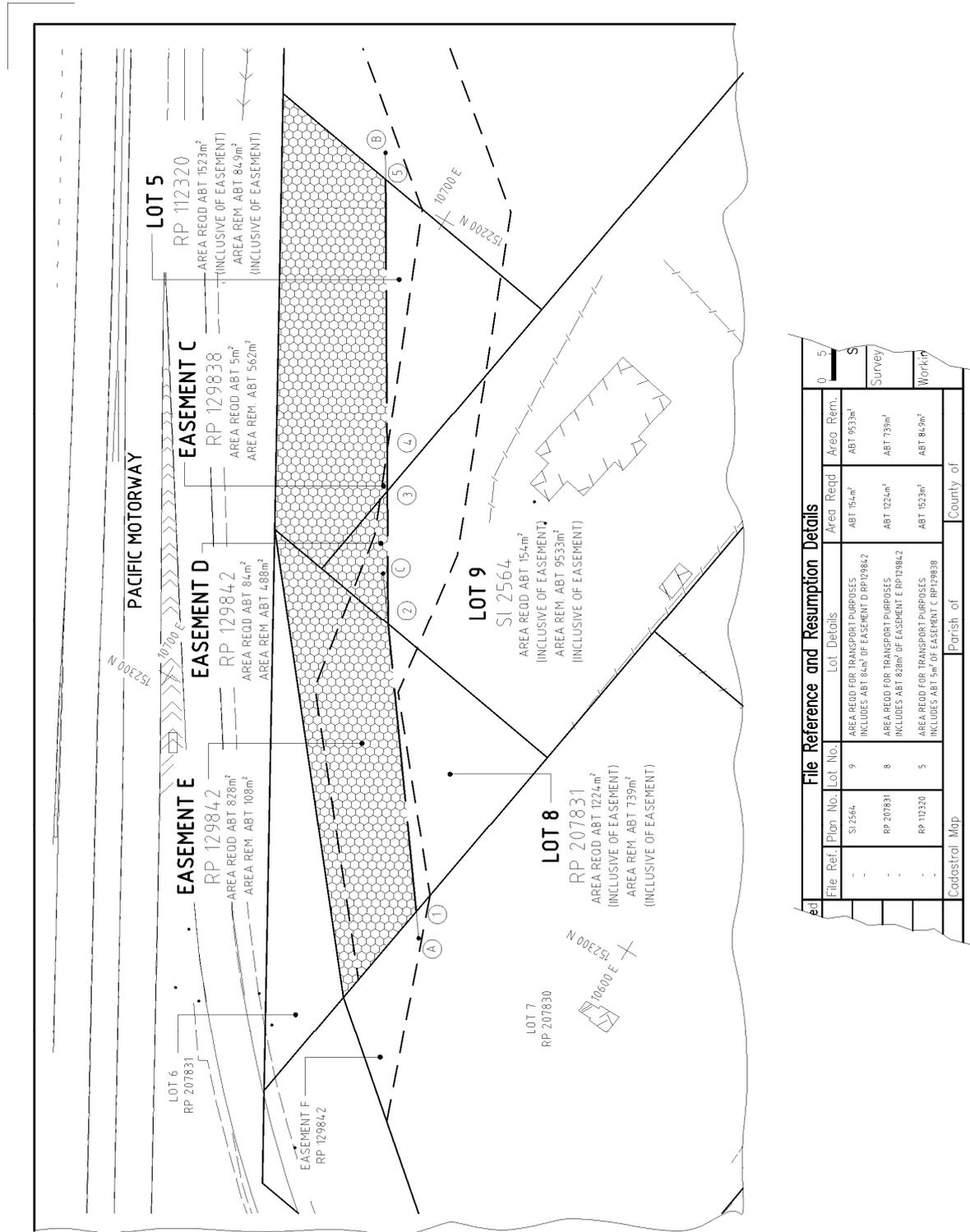


Figure 4.2.4.3(f) - Resumption drawing - Volumetric Requirements (Soil Nailing)

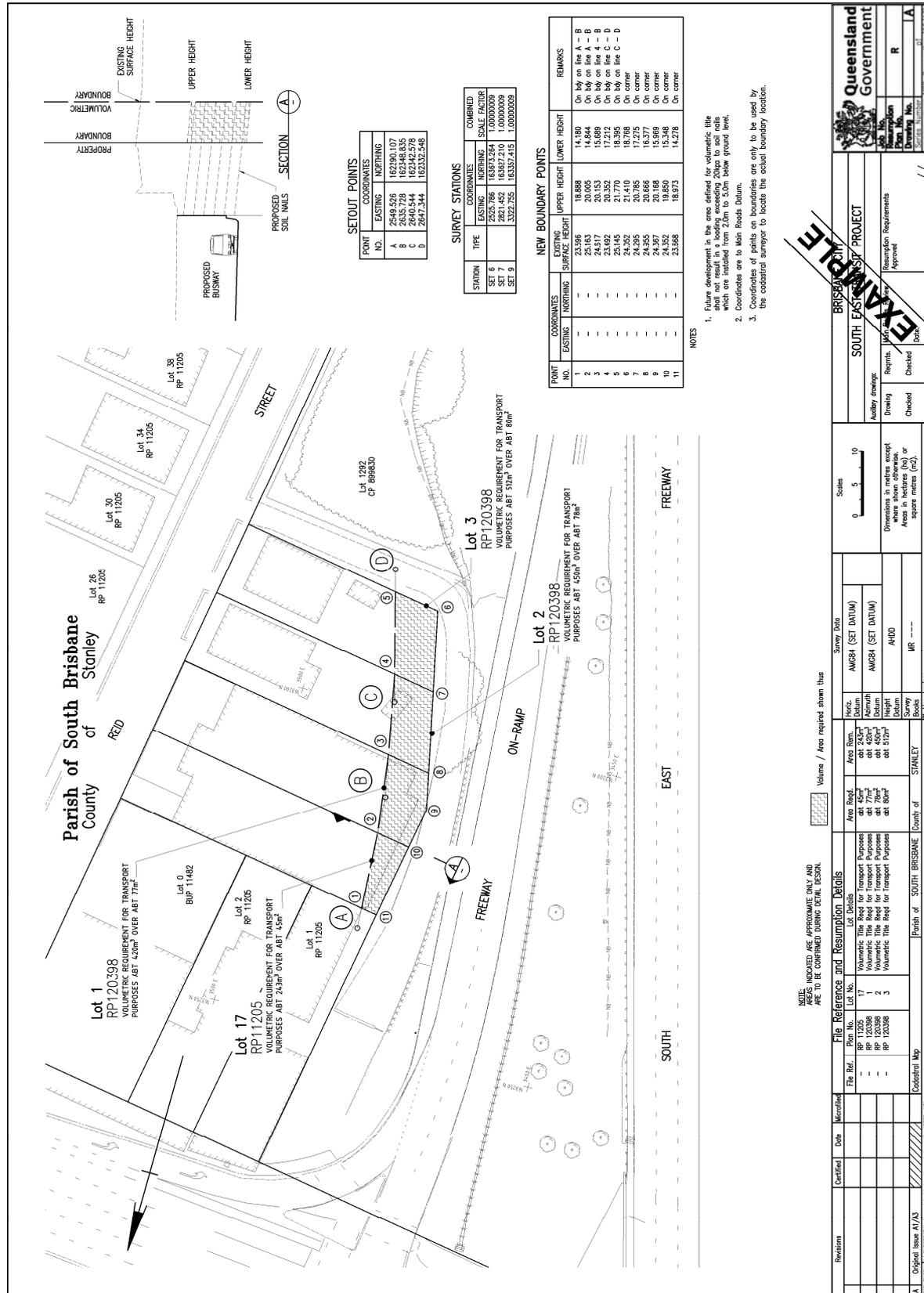
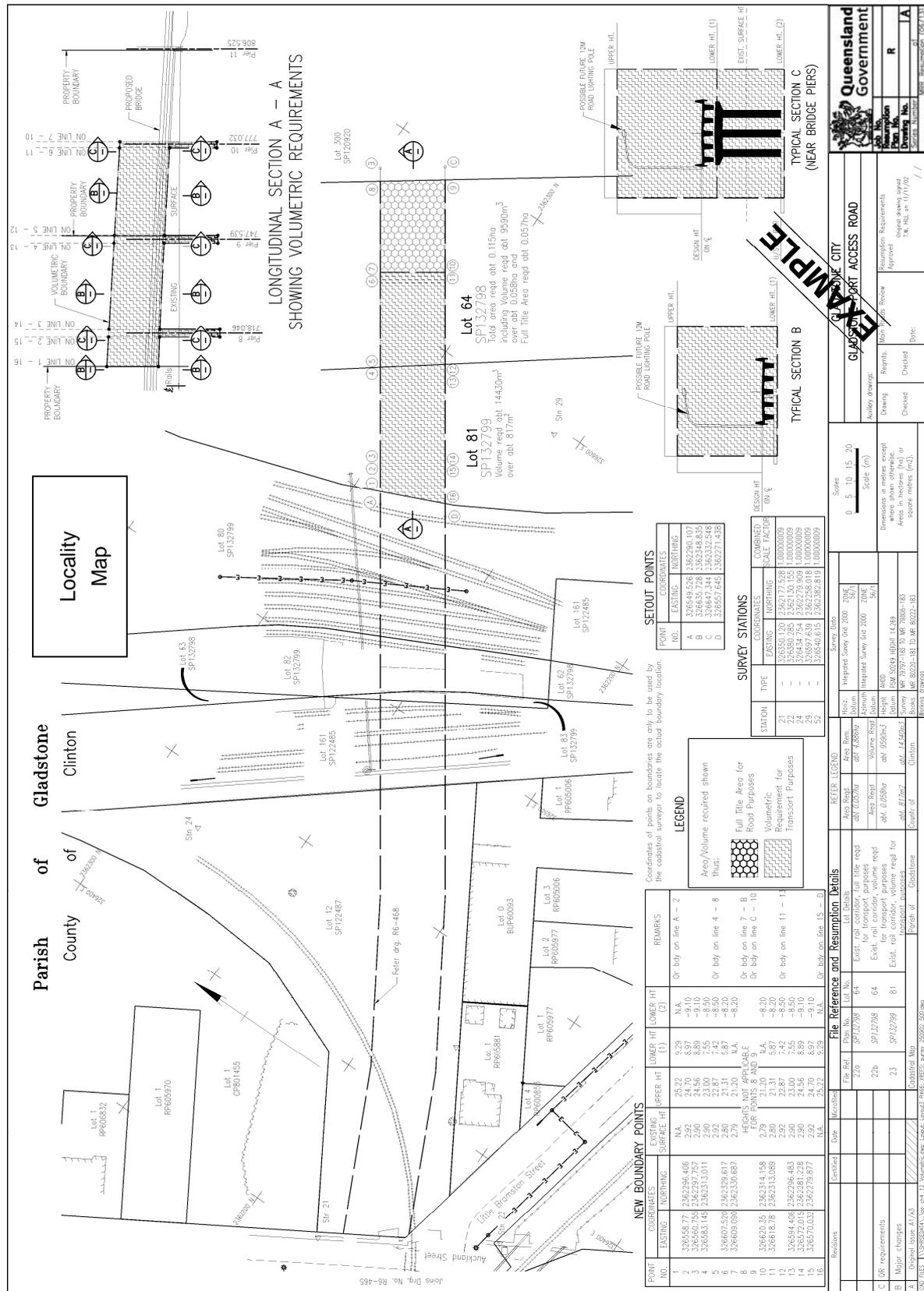


Figure 4.2.4.3(g) - Resumption drawing - Volumetric Requirements (Bridge)



Intersections of state-controlled roads and railways (common area)

Provisions exist in the *Transport Infrastructure Act* which authorise the declaration of a state-controlled road across a (present or proposed) railway or rail corridor, regardless of tenure arrangements. If the Minister decides to declare a road or route, or part of a road or route, that crosses rail corridor land and continues on the other side of the rail corridor to be a state-controlled road, the Minister must declare the part of the rail corridor land where it is crossed by the road or route to be **common area** for the rail corridor land and the state-controlled road. Under the provisions of the common area legislation, both Transport and Main Roads and Queensland Rail have rights at each railway crossing to gain access for construction, maintenance and safety purposes.

With a common area:

- The department's "area" can only be:
 - road
 - a Reserve for road purposes, with the department as trustee.
- If this sub lease exists there will be a statement under:
 - ENCUMBRANCES, EASEMENTS AND INTERESTS SUB LEASE No 701720343 to QUEENSLAND RAIL on the title search.

Examples where the department may construct, maintain and operate the state-controlled road on the common area are:

- a level crossing
- a bridge or other structure over a railway, and
- bridge or other structure that allows the road to pass under the railway.

An example of one of these cases, a bridge over a railway, is included as Figure 4.3.3.4(a).

Highlighting of areas required

To assist the property owner to identify the area to be acquired it should be highlighted with hatching. Resumption areas are to be shown using standard hatch patterns (see Appendix 4A). This procedure will assist property services in the efficient processing of resumption drawings.

Where lettering and shaded areas coincide, the shaded area shall have a section removed to permit the clear display of the lettering concerned.

Where areas required are too small to be effectively highlighted the area concerned should be shown in larger detail. This will avoid the possibility of the required area being overlooked when using the drawing.

Calculation of areas

Areas of resumptions are best measured electronically. Simple truncations and other simple regularly shaped resumptions could be calculated as a check.

Errors in areas

It is essential that areas shown on resumption drawings be a good approximation to the actual areas required as the compensation assessment is made on the approximate area. If such areas are incorrect it follows that compensation paid will also be incorrect and this leads to the situation whereby

the land owner may be overpaid or underpaid. In the latter case, the matter can be adjusted but not so if overpayment has been made. A discrepancy of more than 10% can require additional amended gazetted taking of land notice.

Declaration of realignment details

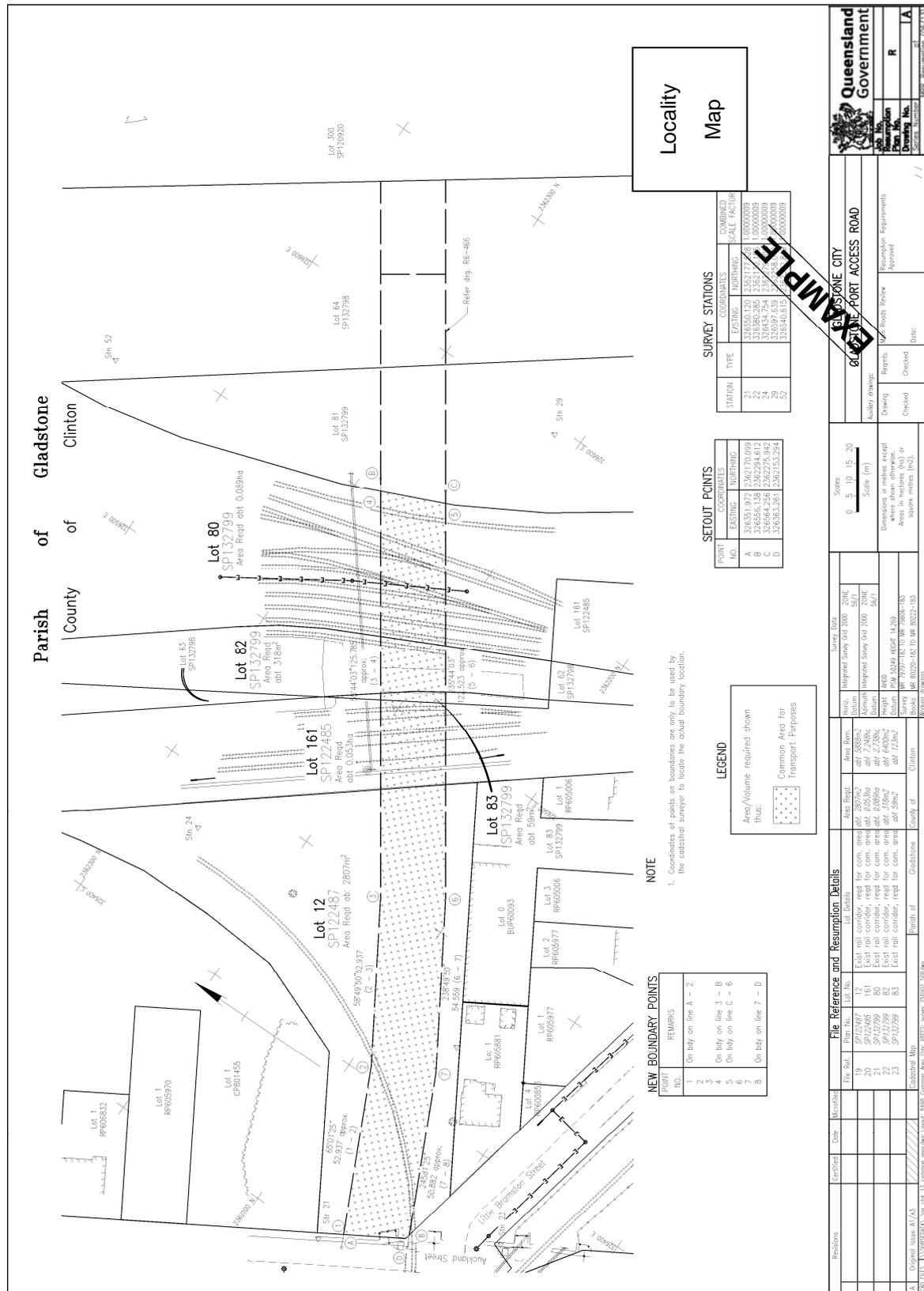
Never show resumption and realignment details on the same drawing as this causes confusion.

4.2.4.4 Lithograph type resumption drawing

Where a road passes through a holding and no surveyed boundaries exist and a constant width resumption is required, the lithograph type resumption drawing is an easy and efficient method of showing the land requirements.

The lithograph type drawing should be created on the standard A1 size title sheet and be reduced to A4 or if necessary A3 size for final plotted output.

Figure 4.2.4.4 - Resumption drawing - Common Area



Resumption through holdings

The following details are required on the lithograph used to mark the road alignment (see Figure 4.2.4.2):

- a standard title block. A bar scale should always be shown in this type of drawing to provide for reproduction at various sizes
- the width of road reserve, and
- the area to be resumed from each holding.

A north point should be shown on all drawings.

When the holding has been surveyed and consequently has a registered lot on plan number, a print of the working drawings must also be forwarded with the marked lithograph. The alignment details may be plotted, on a small scale.

4.2.4.5 Amended resumption drawings

If for some reason a previous resumption drawing needs to be amended, a new drawing may be prepared and will show in the property description column of the title block only the property affected by the amendments. The new drawing is to form a complete record of the amended resumption, cancelling the details shown on the previous drawing, including any other resumed sections of that property not being amended.

Other resumptions on amended resumption drawing

If the amended drawing shows other separate resumptions of other properties, those areas should show the drawn resumption lines in a thin black line with a cross reference to the previous drawing for details. Use standard line types for the work; see Chapter 2 *General Standards*. Point identification numbers, chainages, offsets or areas of these resumptions are not to be given on the amended drawing.

The cross-reference is to be given in the form: "See RXXX-__"

Amendments on amended resumption drawing

If amendments are required and a new drawing is produced, treatment of amendments depends on whether the original resumption has been effected or not and the following rules apply.

- If resumption has been effected by gazetted taking of land notice, the drawing is produced showing the newly resumed property boundary in full line (0.35 mm) and the original boundary in thin broken line (0.35 mm). For standard line types see Chapter 2 *General Standards*. The new area (and total area if applicable) is then determined relative to the newly resumed property boundary.
- If resumption has not been effected, the drawing is produced as for a normal resumption with no reference made to the previously proposed resumption other than a cross-reference to the previous drawing. The new area is labelled "Amended Area abt 1.32 ha" and if there is more than one area in total resumption the new total is labelled "Amended Total area abt 4.75 ha". These areas are determined relative to the original property boundary.

In both these cases, the details of the amended resumption line are shown using the same method of set out as used previously on the drawing. Previously used point numbers may be used again, or the

points may start with point number one as for any new drawing. A cross-reference is made to the previous drawing in the form:

“This drawing amends (part of) Drawing No. RXXX-24” printed just above the title block.

Additional point numbers

Where it is required to introduce an extra point as part of an amendment procedure, the point number of the preceding point should be taken and the letter A added.

Drawing revision column completion

Whenever a resumption drawing is amended the title block must also be amended to register the change for record purposes. This process is similar to that described in the chapter relating to the working drawing and Chapter 2 *General Standards* (see also Clause 4.2.4.5).

4.2.4.6 Completion of standard details on drawing

It is necessary for the finished resumption drawing to be uniquely identifiable. Therefore it is necessary to complete all of the standard details (title block, etc.) before it is ready for submission for recommendation, approval and subsequent processing.

Drawing numbering

Each resumption drawing should have only one job number reference per resumption drawing. In the case of a scheme with more than one job number involved the reference should be made only to the relevant job number. Where a scheme is along a boundary road a separate drawing should be prepared for each job number. This also means that there will be only one local authority and road reference number per drawing.

Drawings are to be numbered consecutively in each district/regional Office commencing with the number one. A number registering book is to be held in the district/region for this purpose. The consecutive number is to be prefixed with the letter R and the number of the district/region, for example

RXXX-27

Where R denotes that the drawing is a resumption drawing, XXX denotes South Coast district/region, 27 denotes No. 27 resumption drawing in the district/regional register for resumptions.

For drawings associated with limitation of access the drawing number should include a suffix of LA, for example:

RXXX-27LA

For drawings where native title rights and interests are affected the drawing number should include a suffix of NT, for example:

RXXX-27NT

For drawings associated with both limitation of access and native title, both suffixes are to be included, for example:

RXXX-27LANT

Resumption drawings are also to be given a drawing number from the department's digital plan room system (GIMS). Resumption plan information must be included into GIMS by your plan room officer.

Resumption drawings being processed in association with limited access

When resumption drawings are prepared for a road boundary widening to an existing road on which limitation of access has been proclaimed, the boundaries on the access limitation drawing should be amended to agree with the proposed resumption and be submitted with the resumption drawing (see also Clause 4.2.5).

When resumption drawings are prepared that include property which affects Native Title Rights and interests, the boundaries on the native title drawing should be amended to agree with the resumption drawing and be submitted with the resumption drawings (see also Clause 4.2.6).

Declaration of realignment

Where a declaration of realignment only is required, the letters RA are to be added after the drawing number, for example:

RXXX-45RA

File references and resumption details

The file references, property descriptions, areas required and areas remaining and the relevant published cadastral maps, parish and county names are to be correctly shown in the title block.

The file reference is a number assigned to the resumption action for each property from which resumptions are being made. These numbers are allocated sequentially, in the file reference column, commencing with the number one and continuing for each resumption action under the same form M695 (Land Request Form).

General details

All survey books, working drawings, land survey plans, associated resumption drawings and job numbers must be shown in the areas provided in the title block.

Adjoining drawings

Each resumption drawing of a group covering any one job must bear a reference to the preceding and/or succeeding drawing, if any. This reference is to be given in the form "Joins R203-24". It is to be printed parallel to and against the right and/or left hand borders of the drawing.

Amended resumption drawings

The title block must be appropriately completed whenever there is a change after issue. Included in the title block is a "revisions" column to be used in a similar manner to that described in the chapter relating to the working drawing and Chapter 2 *General Standards* (see also Clause 4.2.4.5).

With the advent of electronic drawings preparation, amended drawings are regenerated in an "original" format. These drawings must be re-signed as certified and approved. Electronic signatures are not acceptable.

Amendments made up to the time of issue of the drawing may be made without entry in the column. When the drawing is sent to Manager (Strategic Property Management) for issue the system described in the chapter relating to amendment to the roadwork's drawings is to be adopted.

Signatures on resumption drawings

Resumption drawings are not an engineering drawing so do not require an RPEQ signature.

The "TMR Review" box is to be signed off by the person who has a comprehensive knowledge of the project design and the process involved with the taking of land for road purposes. This can be the project coordinator, project manager, lead designer, or project engineer.

'Resumption Requirements Approved' is to be signed off by the person with the delegated authority for the taking of land for road purposes for prepared resumption plans. This signature is also to be signed in blue pen.

For externally produced resumption drawings the TMR Review and Approved areas are to be completed by the department. Also for externally produced drawings the copyright statement is replaced with 'TMR'. Standard drawing sheets are available in TMR AutoCAD customisation.

The diagram shows a drawing title block with the following fields and callouts:

- Initial and full Surname with signature in blue pen**: Points to the 'Initial and full Surname' field.
- Signature of Regional Director or their delegate with signature in blue pen**: Points to the 'Resumption Requirements Approved' field.
- Copyright year is when the Resumption drawings are approved**: Points to the 'Resumption Plan No.' field.

The title block includes the following text and fields:

- LG ROAD
- Auxiliary drawings: ####
- Job No.
- Resumption Plan No. **R210-27**
- Drawing No. **A**
- Series Number of MRR_Resumption (06/13)
- TMR Review (with 'Date:' field)
- Resumption Requirements Approved (with '//' field)

4.2.5 Limitation of access considerations

Standard resumptions, and those involving limitation of access, cannot be processed on the same drawing.

Where limitation of access is involved, a limited access (LA) drawing must accompany the resumption drawing (see Clause 4.4 - Limited Access). This is essential for valuation and negotiation purposes and to ensure statutory timings are strictly adhered to. If a limited access drawing is not submitted, the acquisition procedure will necessarily be delayed.

4.2.6 Native Title considerations

Proposed resumptions must be evaluated to determine whether Native Title rights and interests are affected. The processes of Native Title clearances are to be arranged through the district/region's Administration Officers and are not covered in this manual.

4.3 Native Title

4.3.1 General

Construction and maintenance activities associated with road infrastructure necessarily involve dealings in land and natural resources. The *Commonwealth's Native Title Act 1993* (NTA) and amendments establishes a regime under which these dealings, where they affect native title, must occur in order to be valid. To appropriately consider native title and satisfy the requirements of the NTA, an assessment of native title implications for a dealing must be made to determine whether or not a dealing can proceed. The processes of undertaking and documenting this assessment are included in the department's document "Native Title Work Procedures for Decision Making" Version 1,

30 September 1998). The process of Native Title clearance is to be arranged through the District's Administration Officers and is not covered by this manual.

Native Title drawings form part of the documentation and factual information relied upon in the decision making process and are prepared to assist in the processes of notification, consultation and statutory approvals by:

- identifying the locality of the activity
- providing a clear description of the land, or waters, affected by the activity
- identifying the boundaries of the land and/or waters to be affected and to provide survey information to set out the subject area
- showing the areas of all land parcels affected, including balance areas, and
- assisting potential native title holders to identify the extent of land and areas of cultural significance affected.

Native Title drawings must show clearly and precisely the following details:

- the area of native title rights and interests affected, and
- the exact details of the requirement.

4.3.2 Determining areas affected

In assessing native title implications for an instance, the following information must generally be considered.

- tenure information (current tenure information or the tenure history of the subject land parcel may be required) including requirements from reserves and Unallocated State Land
- the terms of any current tenure (so as to identify any rights which may be inconsistent with the continued existence of native title)
- any known Aboriginal or Torres Strait Islander interest (in particular, whether Aboriginal or Torres Strait Islander occupy or use the land), and
- land use information (to determine the affect of current or previous uses of the land on native title).

In terms of road infrastructure, proposed activities will either require the resumption of property or parts of property, be wholly contained within an existing reserve (e.g. existing road reserve) or happen near, or around, the road reserve, but not in it. The initial determination of the affected areas is made considering the right of way requirements for the proposed activity, based on the tenure information discussed above and the considerations discussed in the following clauses.

4.3.2.1 Areas associated with resumption

Cultural heritage issues, including native title issues, are identified as preliminary resumption issues during the Planning & Preliminary Design phase of a project. Where it is necessary under the provisions of the NTA to obtain approval to proceed with a dealing affecting native title via a notification process (Section 24KA notification), native title drawings must be prepared to detail the affect of the proposed dealings on native title rights and interests for each land parcel affected.

Land requirements are determined from consideration of the road reservation requirements as documented in Section 4.2 (Resumptions). The land taken should be the designed requirement plus approved clearances.

4.3.2.2 Areas not associated with resumption

There are a number of construction related activities that may not involve the resumption of additional land that may proceed with or without notification under the provisions of the NTA. These activities will need to be assessed to determine which category they fall into and duly noted on Annexure 7.1 out on the Native Title Work Procedures for decision making. Examples of these would be:

- declaration of a stock route or proposed activity on such reserve, and
- temporary occupation and use of land for purposes including:
 - surveying (including soil)
 - spoil sites / borrow pits, and
 - forming and use of temporary roads (including sidetracks not on road reserve areas).

Determination of the area affected involves consideration of the actual area requirements and may also consider the following (where relevant):

- construction clearances from the structure or earthworks
- clearing
- provision for access
- temporary and permanent erosion and sediment control structures, and
- drainage outlet considerations.

4.3.3 Preparation of Native Title drawings

Native Title drawings are prepared to identify and detail the area where native title rights and interests are affected. Three main aims of preparing drawings are:

- to present the relevant information in a clear and concise graphical form to enable potential native title holders to readily identify with certainty the land and/or waters to be affected
- to provide the surveyor with sufficient information to survey the boundaries of the land and set out the subject area and allow constructing authorities and native title holders to monitor compliance with these boundaries, and
- to compliment the additional documentation required for assessment of the dealing by the assessing agency.

Native title drawings are required whenever the department proposes activities which affect native title rights and interests and which, to proceed; require notification of potential native title holders. A native title drawing must be submitted in order to authorise the decision to process with land and natural resource management decisions that affect native title.

4.3.3.1 Types of Native Title drawings

There are two types of native title drawings that are likely to be required and they are as follows:

- **Native Title Drawings Associated with Resumption.** In rural and urban areas these native title drawings are produced from the standard resumption drawings for cases where a proposed dealing, associated with resumption, affects native title rights and interests. The type of native title drawing produced would match the type of resumption drawing produced i.e. a lithograph type native title drawing would be produced when the associated resumption drawing is a lithograph type. An example of this type of drawing is included as Figure 4.3.3.4(a).
- **Other Native Title drawings.** These native title drawings are produced to a similar standard and from similar base information as a standard resumption drawing for cases where a proposed dealing, not associated with resumption, affects native title rights and interests. An example of this type of drawing is included as Figure 4.3.3.4(b).

4.3.3.2 Native Title in regards to a busway

General

When constructing a busway several issues need to be taken into account regarding Native Title requirements. These issues occur when constructing a bridge or tunnel or placing soil nails in or over an area of land not clear of Native Title. With busways, designers need to understand how the lease is going to be issued for that area i.e. is it going to be held with no height or depth restrictions or is it going to be held in strata title or volumetric?

Busway areas

The construction of bridges and tunnels with its associated works such as soil nails, can be carried out under Section 24KA of the *Native Title Act* because this construction is classified as public works. The area that is being suppressed under Section 24KA should include all areas incidental to the construction of the project to accommodate all building aspects and is to be defined on the department's Native Title drawing.

Some of the department's Native Title drawings may need to be done in volumetric but this depends on what is going to be constructed. For construction requirements the area defined on the department's Native Title drawing could be larger than what is required. This will not be a problem as the resumption process for the lease will define the area to operate and maintain the busway.

Busway requirement

In relation to the lease for the busway it will either be a perpetual style lease or a head lease (like the railways use) which provides the operator exclusive possession rights to the land indicated in the lease document.

To issue this lease over the area necessary to operate and maintain the busway, Native Title rights and interests need to be acquired under Section 24MD of the *Native Title Act*. This would require Resumption drawings and Native Title drawings to be drawn up to show the area to be resumed for the lease which is necessary to operate and maintain the busway. This would include all strata title and volumetric requirements e.g. bridges, tunnels and soil nails.

For example if Transport and Main Roads was going to construct a bridge crossing a creek the lease would probably be done as a volumetric requirement resulting in a Strata Title Lease.

4.3.3.3 Preparation of Native Title drawings

Native Title drawing preparation follows very similar procedures for the preparation of both types of drawings required (see Clause 4.3.3.1), with only the reference to auxiliary resumption drawings being the difference between the two types. Further, the procedures and presentation standards to be used for preparation of native title drawings are to be in accordance with those for preparation of resumption drawings as outlined in Section 4.2 (Resumptions). Only information that differs from that covered by Clause 4.2.4.2 of Section 4.2 (Resumptions) or is unique to native title drawings is included in this section.

Similarly to resumption drawings, native title drawings will ultimately be reduced (commonly to half-size) and the minimum lettering sizes will apply. Refer to Chapter 2 *General Standards*.

Locality Map

To assist in identification of the land affected it a requirement to show a locality map on every native title drawing. It is recommended that the locality map be an extract from a Department of Natural Resources and Mines BLIN map scanned and inserted at as large a scale possible to give a clear picture of the native title location. All other requirements for presentation of the locality map are as for Clause 4.2.4.2 of Section 4.2 (Resumptions).

Drafting standard

The type of drafting required on these drawings should not differ to any extent from that of the resumption drawing.

4.3.3.4 Presentation of Native Title drawings

Only information that differs from that covered by Clause 4.2.4.3 (Resumptions) or is unique to Native Title drawings is included in this Clause.

Figure 4.3.3.4(a) - Native Title drawings associated with resumption

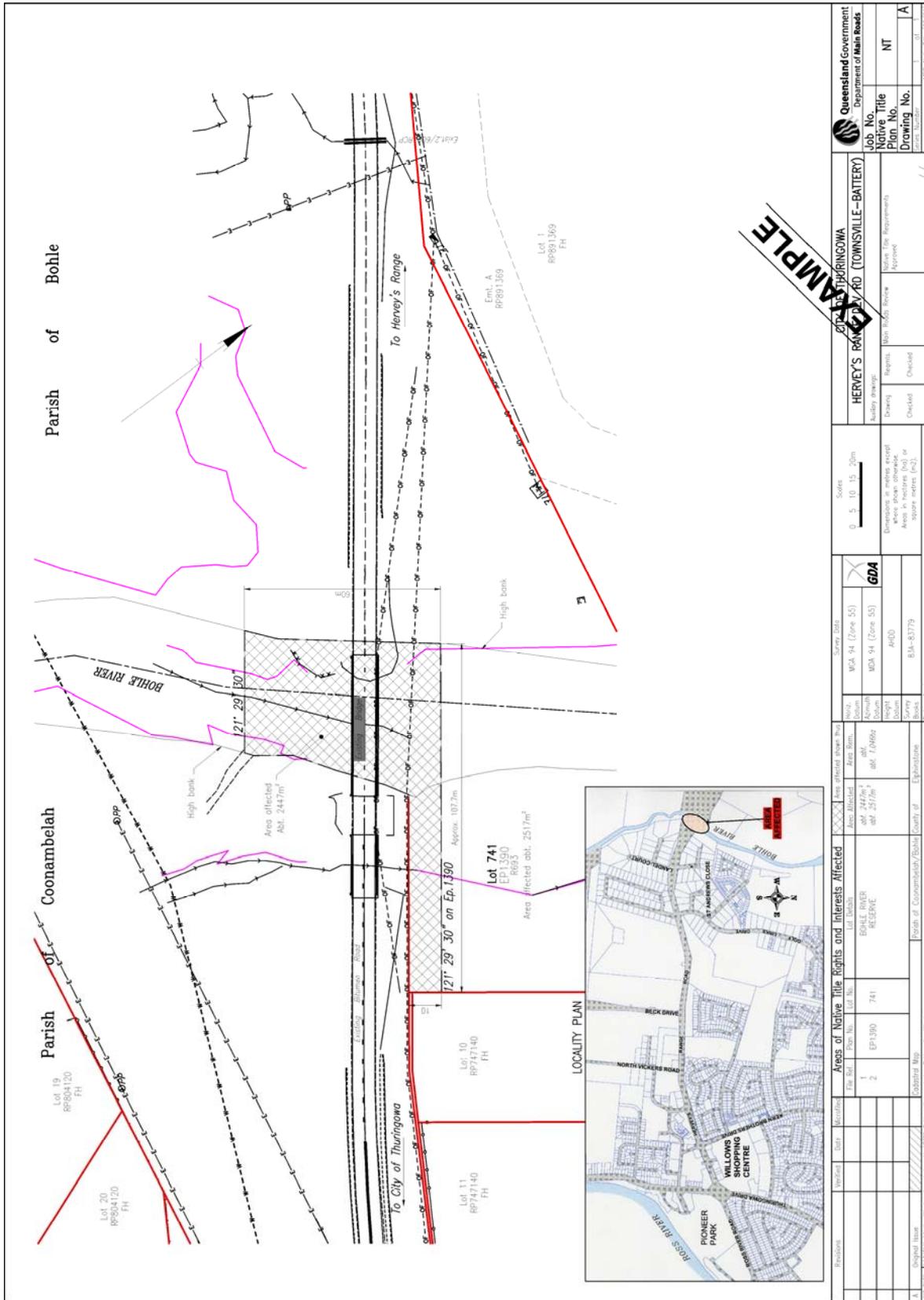
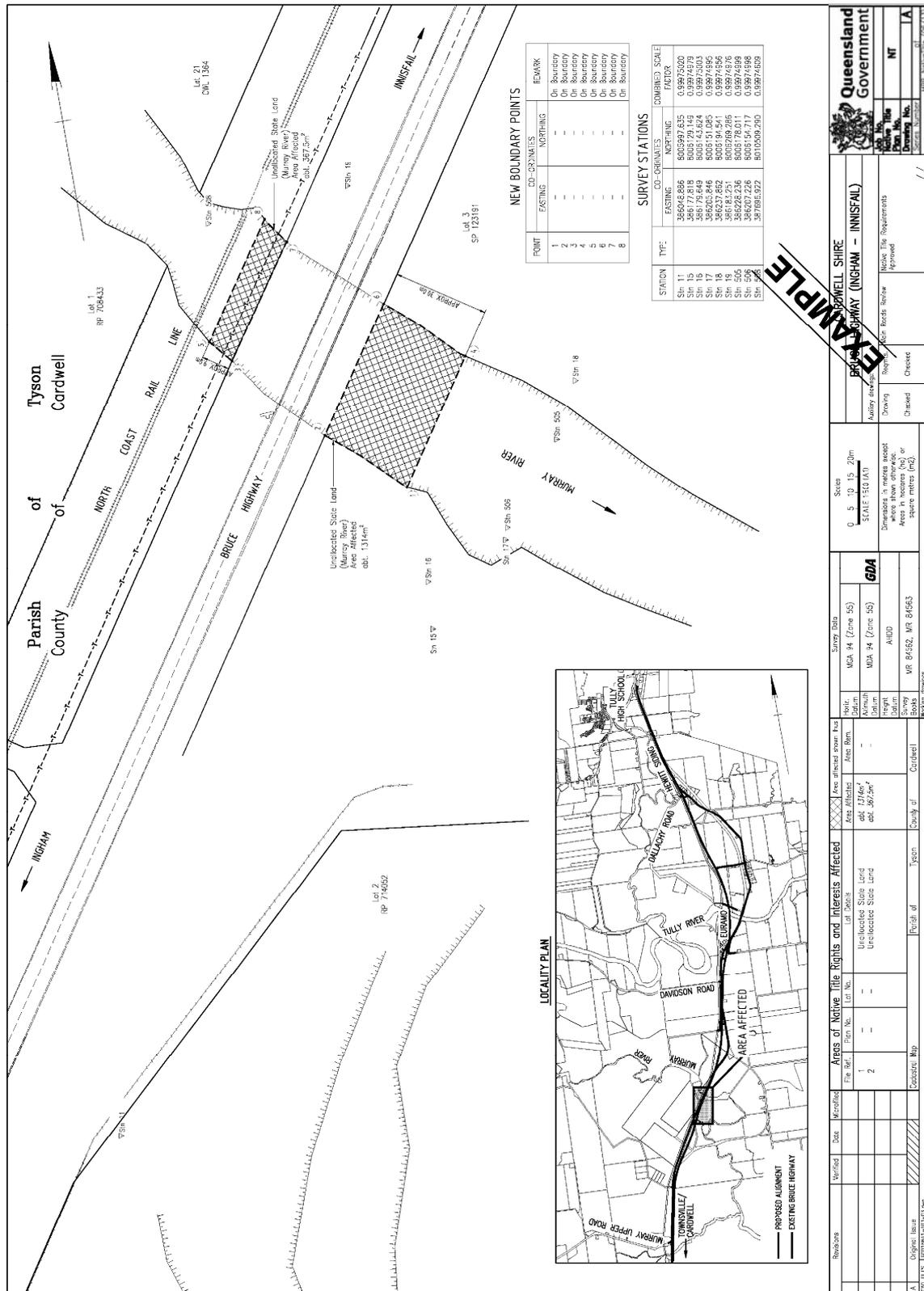


Figure 4.3.3.4(b) - Other Native Title drawings



Highlighting of areas required

To assist the potential native titleholder to identify the area to be affected it should be highlighted with hatching. Affected areas are to be shown using a standard hatch pattern as shown on the various

example drawings and as specified in Appendix 4B. This procedure will assist Strategic Property Management in the efficient processing of native title drawings.

Errors in area

It is essential that areas shown on native title drawings are the actual areas required as the assessment and consultation process is undertaken on the area shown on the drawings and the area is ultimately set out on the ground and monitored. Unlike the resumption process, compensation issues in relation to native titleholders will be addressed more through positive action of protecting cultural heritage, minimising disturbance to the land and making good where possible.

Drawing numbering

Drawings are to be assigned in each district/region using the same registering book held for the resumption drawings as follows:

- Native Title Drawings Associated with Resumption. Native Title drawings are to be assigned the same number as the associated resumption drawing for example:

NUMBER Resumption	NUMBER Native Title
RXXX-144NT	NTXXX-144
RXXX-145NT	NTXXX-145

- Other Native Title Drawings. Native Title drawings of this sort are to be assigned the next available number from the register, with the NT number recorded in the appropriate column, and no corresponding resumption number entered for example:

NUMBER Resumption	NUMBER Native Title
	NTXXX-148

- In both cases, the number is to be prefixed with the letters NT and the number of the district/region, for example:

NTXXX-144

Where NT denotes that the drawing is a native title drawing, XXX denotes South Coast district/region, 144 denotes No. 144 native title drawing in the district/regional register.

Native Title drawings are also to be given a drawing number from the department's digital plan room system (GIMS). Native Title plan information must be included into GIMS by your plan room officer.

4.4 Limited access

4.4.1 General

Limited access roads are those state-controlled roads to which access limitation legislation has been applied under the provisions of Section 54 (1) of the *Transport Infrastructure Act 1994*. Access limitation is applied to achieve the appropriate levels of traffic speed and traffic flow capacity required for the highest level of safety for our road users. Access limitation legislation is the major mechanism for development control as it gives the department total control of access, existing or proposed, from land abutting our road. Section 62 of the *Transport Infrastructure Act 1994* also allows the department to manage individual access to a state-controlled road where no access limitation is in place.

Limited access plans show permitted road access locations to a limited access state-controlled road or to land which is intended to become a limited access state-controlled road. The plans are prepared as

part of road-specific access management policies. Provisions in the plans which identify the limited access sections of the state-controlled road are required to satisfy the requirements of the *Transport Infrastructure Act 1994*. The provisions in the plans which show approved individual property access are not required by legislation but are included for completeness.

Road-specific policies which detail how the department will generally deal with the management of access between state-controlled roads and individual properties must be developed before a limited access road is declared. A policy may also be developed for limited access roads which have been previously declared and which do not have a policy. Development of road-specific access management policy is the responsibility of the appropriate district/region. This section will mainly deal with the requirements relating to preparation of limited access plans.

It should be noted the decision to declare a limited access road is optional and can be made on a road by road basis by district/regions, as considered necessary.

4.4.2 Terminology

State-controlled road

Includes a road or land, or part of a road or land, that is declared to be a state-controlled road under Sections 24 and 25 of the *Transport Infrastructure Act 1994* (Declaration of state-controlled road).

It also includes a road or land that the chief executive has notified the relevant local government in writing, is intended to become a state-controlled road.

Motorway

Motorways are those state-controlled roads to which motorway legislation has been applied under the provisions of Section 27 of the *Transport Infrastructure Act 1994*. Motorways are declared to provide the department with increased powers to ensure that the strategic functions of its roads are preserved. These powers include the regulation of the types of traffic using motorways and the regulation of advertising fronting motorways.

Limited access road

Includes part or all of a state-controlled road that is declared to be a limited access road under Section 54 (1) of the *Transport Infrastructure Act 1994* (Declaration of limited access roads).

Permitted road access location

Includes a permitted road access location under a decision in force under Section 62 of the *Transport Infrastructure Act 1994* (Management of access between individual properties and state-controlled roads).

Provided road access location or route

These include access locations or route which will exist at the date of the limited access road declaration. It will be existing by virtue of it already being an established means of access which is acceptable with, or without, minor construction by the director general to connect it to the new or existing carriageway; or by it being a new means of access constructed by the director general to replace an already established means of access which is unacceptable in its position relative to the carriageway. A "proposed" road access location or route is one which has been determined will be provided by the director general at some future date in anticipation of some future development (for example, a new subdivisional road).

4.4.3 Preparation of limited access plans

Preparation of limited access plans generally falls into either of the following categories:

1. Preparation of new limited access plans to cover either an existing state-controlled road, a new or proposed new road corridor, deviation of a state-controlled road or the declaration of limitation of access over a local government road which is to be declared a state-controlled road.
2. Amendments to existing limited access plans. These amendments may result from such actions as changes to cadastral boundaries abutting the roadway e.g. through resumption or subdivision, or changes to former decisions made relating to access, under the provisions of Section 62 of the *Transport Infrastructure Act 1994*.

The plans shall show, in relation to the state-controlled road, every means of access or route “provided” and “proposed” by the director general. It shall not show means of access “permitted” by the director general subsequent to the limited access road declaration date, or the locations where he may, subsequent to the declaration date, permit in writing the driving of animals across the limited access road.

Limited access plan numbers are allocated by Corporate Mapping Unit within Geospatial Technologies Section.

4.4.3.1 Limited access road notification for proposed new corridors

This applies when limitation of access is to be applied to a proposed new road (future state-controlled road) or a deviation prior to its construction and declaration as a state-controlled road.

Limited access plans showing all “proposed” means of access (see Figure 4.4.3.3(a) are prepared by a district/region and approved by the district/regional director.

Limited access plans are forwarded to Manager (Corporate Mapping) directly from a district/region (together with a request to proceed with access limitation declaration) or, in the case of a scheme involving land resumption, from Strategic Property Management who have also been forwarded relevant resumption plans from a district/region.

On receipt of the request, limited access plans, access management policy and other documentation, Corporate Mapping Unit will prepare the necessary documentation for notification in the Queensland Government Gazette. After notification in the gazette, the gazettal details will be recorded on the plans. Copies will be made and then distributed to the relevant district/region and local governments where they will be made available for viewing by the public. Corporate Mapping Unit advertises details of the notification in a local newspaper (and/or newspaper circulating throughout the State), advising the public where they can inspect the plans.

The original plans will be retained by the Plan Room, Geospatial Technologies Section and, upon declaration of the new corridor as a state-controlled road, updated by changing the “proposed” symbols to “provided” where appropriate, and by making any other necessary amendments. (see Figure 4.4.3.3(b).

4.4.3.2 Limited access road notification for state-controlled roads

This applies when limitation of access is applied to an existing state-controlled road or concurrently with the declaration of a new state-controlled road or new road corridor or deviation. In this case the limited access plans should be prepared to show all “provided” and “proposed” means of access or

routes, as they will be at the declaration date and as approved by the district/regional director. A request to proceed with access limitation declaration, limited access plans, access management policy and other documentation are forwarded to Manager (Corporate Mapping) by a district/region for processing as per Section 4.4.3.1 (see Figure 4.4.3.3(b)).

4.4.3.3 Preparation of new limited access plans

Plan size and media

Limited access plans are to be prepared on a standard A3 size title sheet. For using correct plotting media, suitable for the required presentation standard, refer DDPSM Chapter 2 Section 2.3.4.

Plan scales

The scale chosen for the plan should enable it to be easily read after reduction. Generally, in rural areas a final printed output scale of 1:5000 (A3) will be satisfactory while in urban areas a final printed output scale of 1:2500 (A3) or larger is required.

Drafting standard

The type of drafting required on the plans should not differ to any extent from that of the resumption plans, except that only minimal features are shown to emphasise the symbols and annotations relating to access.

Typical information required on plan

The following information is to be accurately recorded on the plan:

- the latest cadastral information available using the lot on plan method described in Section 4.2 (Resumptions)
- “provided” and “proposed” road access locations and entries and exits are to be indicated using standard symbols shown in the legend area of the title block
- the road access location numbers, property descriptions, level of access permitted, the maximum width of access, actual land use occurring, permit issue date and comments are to be correctly shown in the title block. For each plan in the series, the access number is assigned sequentially to each property access location in the access number column, commencing with the number one for the first property access and progressively increasing to the last property access
- any conditions or decisions applied and the strategy that will be used to manage access to the roadway in the future
- each limited access plan of a group covering any one road or part of a road must bear a reference to the preceding and/or succeeding plan, if any. This reference is to be given in the form “Joins Plan LA...”. It is to be parallel to and against the right and/or left hand borders of the plan
- no property improvements or existing features are to be shown, except rivers and large creeks which should be shown and named
- a north point, and
- vincula, where they apply.



- limited access plans are to be given a drawing number from the department's digital plan room system (GIMS). Limited access plan information must be included into GIMS by your plan room officer.

Service roads

Where land abutting a state-controlled road is separated from the through roadway by a service road, only the point of access from the service road to the through roadway is shown. Individual property access locations are not shown. The service road is not included in the area to which access is limited (see Figure 4.4.3.3(c)).

Motorways

Motorway boundaries are normally shown on the same plans prepared for limitation of access. Generally, limitation of access applies to the whole road reserve, while the boundaries for motorway legislation often reflect fencing locations (within the road reserve), earthworks batter lines and, in the case of a motorway crossing a state-controlled road, the bridge parapets.

See Figure 4.4.3.3(c) for an example of a motorway/limited access plan.

4.4.3.4 Presentation of new limited access plans

Line types

Since limitation of access generally applies to the whole road reserve, the boundaries of the limitation of access declaration on the plan(s) are usually bound by the standard line type representing property boundaries.

If the limited access plan is being prepared in conjunction with resumption plans, the declaration boundary will be the proposed resumption boundary except it will be shown in a continuous line style, as for a property boundary.

Access numbering

At each property access location, the location must be identified by assigning it a number and by placing the appropriate standard symbol on the declaration boundary.

The numbers assigned are to be consecutive, commencing at the access the least distance from the road origin or datum point. The numbers (in circles 6 – 7 mm diameter) are to be placed adjacent to the locations to which they refer. Each plan should commence with the access number one.

If required, entry and exit locations may be identified by assigning letters, rather than numbers. This is useful in cases where specific comments regarding entry and/or exit from existing or proposed roads are necessary. In this case, the letters should progress sequentially, as for numbers, and each plan where this notation is required should commence with the letter A.

Highlighting of limitation of access areas

In order to clearly identify the area to which limitation of access applies, the area should be highlighted with hatching. Areas to which limitation of access apply are to be shown using a standard hatch pattern (see Appendix 4C).

4.4.3.5 Amendments to existing plans

Limited access plans are enduring legal documents, which once prepared can be updated over many years. The need to upgrade the format of the limited access plan, and the information to be shown, will dictate whether changes are treated as minor or major amendments.

Minor amendments

Changes that would fall into this category may include:

- a change in location of an existing access
- changes to the conditions attached to an existing access
- the provision of a new road access location, and
- the revocation of an existing access.

At the time of amendment, the original cadastral information should be checked using current Digital Cadastral Data Base (DCDB) and updated where necessary. When finalised, the plan, together with a covering memo, shall be sent to Manager (Corporate Mapping). The memo shall address the minor nature of the amendment and any previous communication with local governments.

Major amendments

Changes that would fall into this category may include:

- changes to the area covered by limited access e.g. resumption of land for road reserve
- declaration of motorway over an existing limited access road, and
- completion of a future access management policy for an existing limited access road.

At the time of amendment, the original cadastral information should be checked using current Digital Cadastral Data Base (DCDB) and updated where necessary. Changes to the area of roadway covered by limited access e.g. resumption of land for new road reserve, will require gazettal of that new area of road. This in turn will require the preparation of an access management policy and the notification to local government.

The decision to amend the existing plan or to reissue the information under a new plan number will often be the result of a value judgment with regard to time and resources available, versus the quality and usefulness of the finished product.

When finalised, the plan together with a covering memo, a copy of the access management policy and a copy of the resumption plan, if applicable, shall be sent to the Manager (Corporate Mapping). The covering memo shall address any previous communication with local governments.

4.4.4 Additional requirements

All new requests for limitation of access must be accompanied with a copy of the district/regional director's notification to the local government of its intentions with regard to limitation of access and also a copy of the local government letter of approval of the proposals.

The district/region must also provide an access management policy with each limited access plan or set of plans. These policies will be prepared, consistent with future planning requirements and road objectives, and will outline how the department intends to deal with the management of access between individual properties and the limited access road.

4.4.4.1 Limited access roads and stock routes

All roads are potential stock routes, and in every case where a limited access road is contemplated, the needs of travelling stock should be considered. Advice should be sought at an early planning stage to ensure that the proposal is compatible with stock route requirements. Because stock movements may be infrequent and costs to make alternative provision for travelling stock may be high, there is a need to examine every case on its merits.

Under the provisions of the *Land Protection Act*, the administration of the Stock Route Network is shared between local government and the Department of Natural Resources and Mines (DNRM).

Local government is responsible for day-to-day management, while the Stock Route Management Unit of DERM is responsible for providing the framework of legislation and policy for stock route management and support for local governments.

The initiating officer (or his delegate) within a district/region should forward all proposals for limited access to the relevant local government. If necessary, district/regions should arrange a meeting to discuss each case, as required, ensuring that there is no conflict with the competing needs of stock routes. Correspondence verifying stock route clearance should be included with the limited access package when it is forwarded to Manager (Corporate Mapping).

After notification of access limitation in the gazette, Manager (Corporate Mapping) will distribute copies of the gazette notification and relevant plans to local government(s) for their records.

4.5 Road declaration

4.5.1 General

The state-controlled road declaration (gazettal) process is a legal requirement under Sections 24 and 25 of the *Transport Infrastructure Act 1994* to identify those roads that are “owned/managed” by the state. The *Transport Infrastructure Act* outlines how and what powers the department has to do this.

Declaration of the network controlled by the department is a fundamental requirement for the department to be able to manage its road assets including construction, maintenance and operation of the network, management of access, adjacent development, public utilities and ancillary works and encroachments (AWE’s).

The department’s district/region offices have a key role in the overall declaration process as many of the network changes are initiated by actions undertaken by them.

4.5.2 Reasons for a road declaration

Road declaration action may be initiated for a number of reasons, including:

- reviews of the state-controlled road network involving changes to “ownership” between the department and a local government authority
- declaration as a state-controlled road of an existing local government, private, mining or other road
- construction of a new road as a state-controlled road
- revoking of a declaration of an existing state-controlled road, returning control to a local government
- major deviations involving returning control of a section/s of the old road alignment to a local government
- minor deviations involving small truncations within or outside the existing road reserve – small realignments
- administrative changes e.g. local government amalgamations and boundary changes, road number/name changes etc. (note: changes to road names require changes to the departments’ various systems and shouldn’t be undertaken lightly)
- updates to declaration plans using the latest cadastral information (DCDB) and centreline information.

The timing of a declaration action can be dependent on:

- a specific date for the implementation of any review changes
- local government amalgamations and boundary changes - the date they become effective, or
- changes to the network resulting from construction of new works or deviations (the target is to declare the changes as close as possible to when the work is open to traffic).

Once land that the department has identified as a future road corridor has been acquired/resumed, it can then be declared as a state-controlled road and/or limited access road, ensuring the department can control development and access to abutting land at an early stage. The *Transport Infrastructure Act 1994* also allows for this land to be declared as a future state-controlled road prior to acquisition.

4.5.3 Road declaration process overview

4.5.3.1 Overview

Whilst Corporate Mapping Unit (Geospatial Technologies) has primary responsibility for managing and delivering the department's state-controlled road declaration process as required under Sections 24, 25 and 26 of the *Transport Infrastructure Act 1994*, Regions, Strategic Property Management, Approvals Team (Policy, Planning and Investment Division), Queensland Rail and local governments also have key roles and responsibilities.

Most declaration changes are initiated by district/regional staff and usually relate to changes in location to the network resulting from the completion of new work.

There is a need to resolve any issues of ownership and responsibility with local government/s in the planning stages so that declaration actions coincide with the opening of the road for public use.

Delays not only impact on the declaration process, but also affect the department's ability to enact certain management powers (e.g., development control, AWE and public utility management and access control).

4.5.3.2 Plan advice

The officer responsible for producing the road declaration plans must, before plan preparation, ensure all property issues have been finalized e.g. resumptions, road dedication and road closures actions.

Crown Law advice concerning Section 24 (3) of the *Transport Infrastructure Act* and the level of detail required to enable the location of the road to be identified requires;

"The level of detail for identifying the location of a state-controlled road can be quite general and yet can be made as detailed as necessary from a practical perspective to delineate between areas of different control, so long as the state-controlled road location is sufficiently certain then it will be a valid declaration".

Corporate Mapping Unit consults with the district/regions on the preparation of standard road declaration plans based on road centrelines. For ARMIS purposes, the district/regional Roads Information Systems Coordinator needs to be involved (for more detailed information, contact Corporate Mapping Unit).

For complex road corridors, area based road declaration plans are produced by the relevant district/region in consultation with Corporate Mapping Unit (see Figures 4.5.3.3(a) to 4.5.3.3(c)).

If needed, Corporate Mapping Unit allocates plan numbers as opposed to drawing numbers and road numbers for new road declarations.

GIMS drawing numbers are to be allocated by the Plan Room in Geospatial Technologies Section.

4.5.3.3 Transport and Main Roads/Queensland Rail (TMR/QR) common areas

If the state-controlled road to be declared crosses rail corridor land, Section 26 of the *Transport Infrastructure Act* requires the declaration of a common area.

The district/region, in consultation with the local rail manager, must agree on the limits of the common area and produce a survey plan of the area (to be surveyed or compiled from existing plans). See Figures 4.5.3.3(d) to 4.5.3.3(f).

After the plan has been prepared Strategic Property Management is responsible for undertaking the necessary action to get sign off by Queensland Rail and Transport and Main Roads. Once finalised, the plan will be forwarded to Corporate Mapping Unit to be processed as part of the state-controlled road declaration.

Following gazettal, Strategic Property Management will forward a copy of the gazette notification, relevant road declaration plan with the common area shown and the original survey plan to the Registrar of Titles (Department of Natural Resources and Mines) who records the common area declaration on the relevant rail corridor lease.

Future state-controlled road declaration

A future state-controlled road under Section 42 (11) of the *Transport Infrastructure Act 1994*, means a road or land (all land, not just state land) that the chief executive has notified the local government in writing, is intended to become a state-controlled road.

Under Section 42 (12) of the *Transport Infrastructure Act 1994*, the chief executive must cause a copy of each notice under Section 42 (11) to be published in the Government Gazette.

The gazettal of the future state-controlled road corridor provides the department with the opportunity to formally consider any impacts of future land development adjacent to the proposed new corridor, in accordance with the *Sustainable Planning Act 2009*.

Area based future state-controlled road declaration plans are produced by the relevant district/region in consultation with Corporate Mapping Unit which if needed, will allocate plan numbers and road numbers for proposed new roads (see Figure 4.5.3.3(f) Future State-Controlled Road Example).

A request to proceed with future state-controlled road declaration together with plans, local government notification and all relevant documentation are forwarded to Manager (Corporate Mapping) by the district/region, for processing.

ARMIS reference point plans

Reference points help define one's position on the road and are selected locations or features which can be easily and consistently located.

As a follow up after all state-controlled road declarations, reference point plans showing all reference point locations and descriptions within the Road Reference System in ARMIS, are produced (see Figure 4.5.3.3(h) ARMIS Reference Point Plan).

Figure 4.5.3.3(c) - Line based common area example

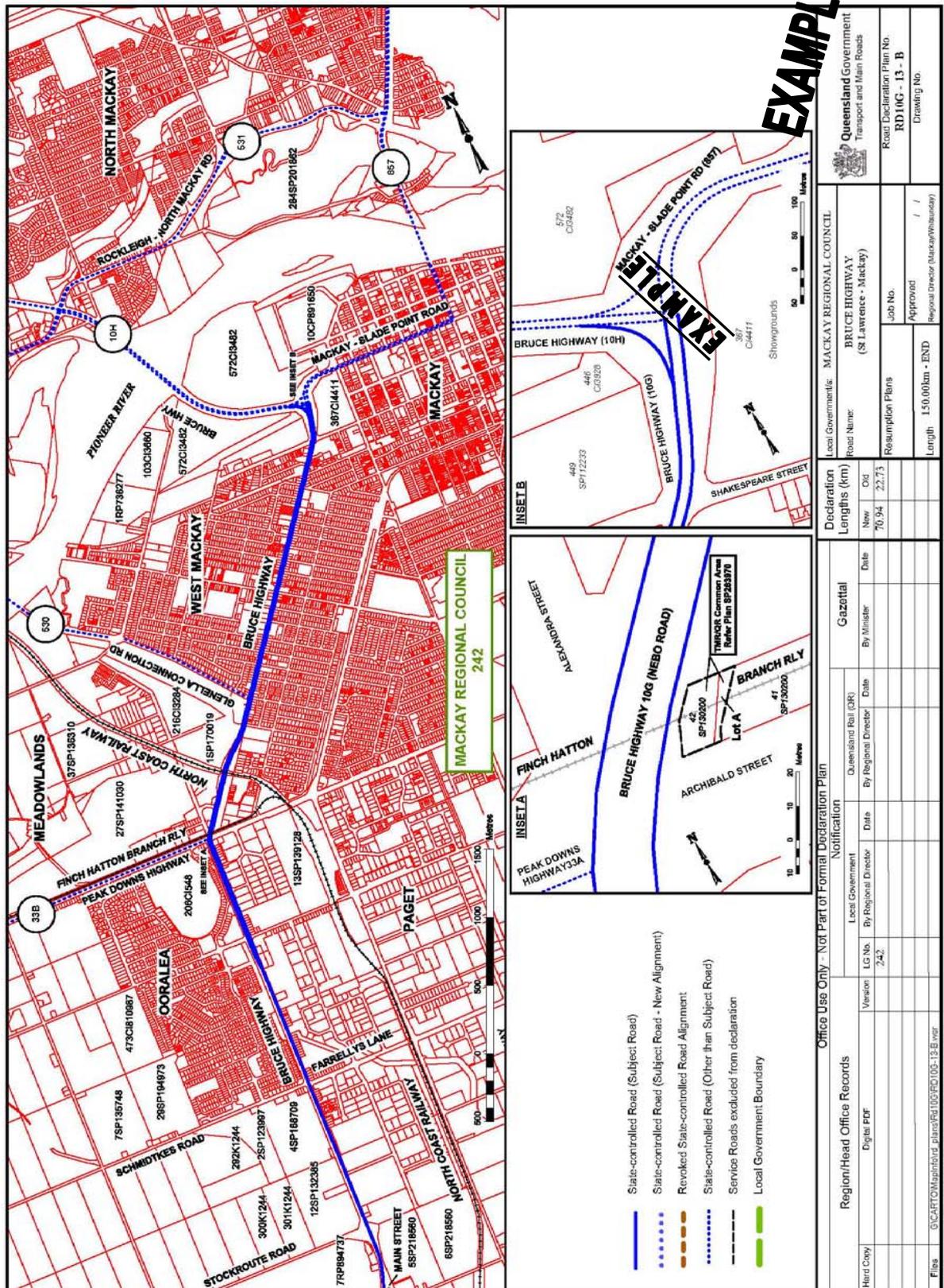
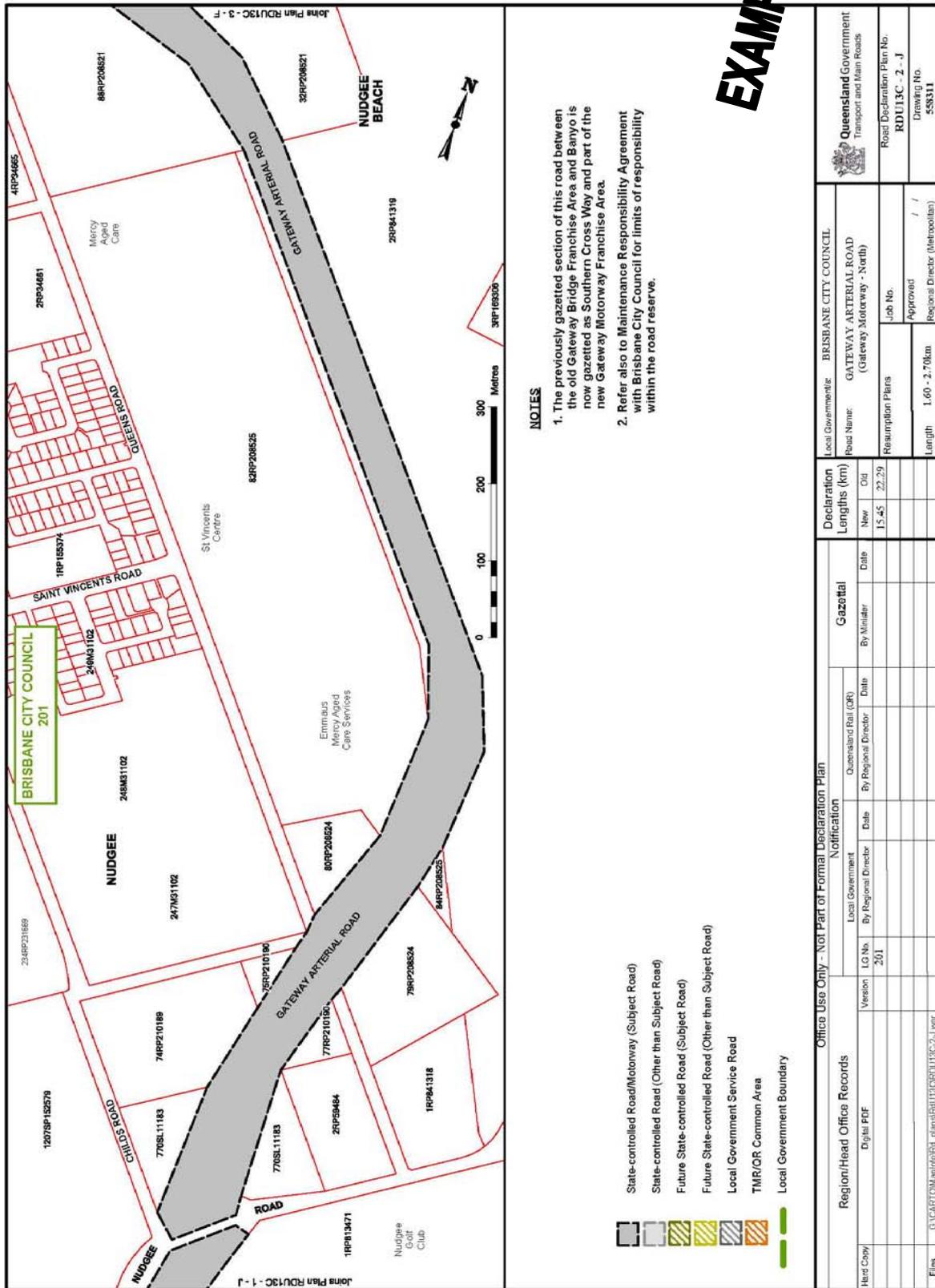


Figure 4.5.3.3(e) - Area based example

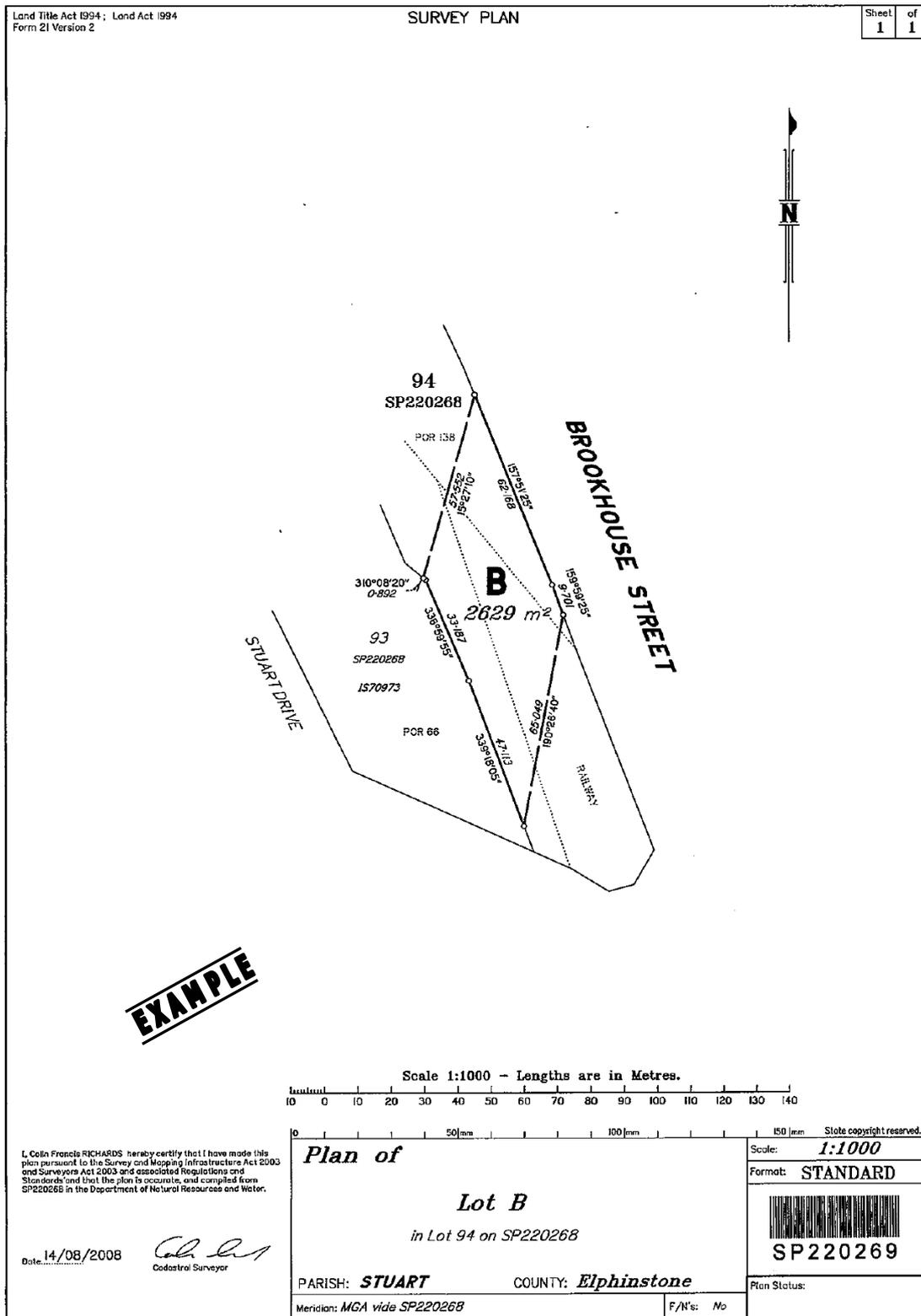


- NOTES**
1. The previously gazetted section of this road between the old Gateway Bridge Franchise Area and Banyo is now gazetted as Southern Cross Way and part of the new Gateway Motorway Franchise Area.
 2. Refer also to Maintenance Responsibility Agreement with Brisbane City Council for limits of responsibility within the road reserve.

EXAMPLE

Region/Head Office Records		Office Use Only - Not Part of Formal Declaration Plan				Local Government		Queensland Government	
Head Copy	Digital PDF	Version	LC No	By Regional Director	Date	By Regional Director	Date	Local Government	Road Name
		201	201					BRISBANE CITY COUNCIL	GATEWAY ARTERIAL ROAD (Gateway Motorway - North)
									Resumption Plans
									Job No.
									Approved
									Regional Director (Metropolitan)
									Length 1.60 - 2.70km
									Road Declaration Plan No.
									RDU13C - 2 - J
									Drawing No.
									558311

Figure 4.5.3.3(g) - Common area survey plan (sheet 1 of 2)



EXAMPLE

4.5.3.4 Local Government consultation

As required by Section 25 of the *Transport Infrastructure Act*, the Minister must, before making or revoking a declaration under Section 24:

- a) notify each local government that would, in the Minister's opinion, be affected by the proposed declaration or revocation, and
- b) give the local governments a reasonable opportunity to make submissions to the Minister on the proposed declaration or revocation.

4.5.3.5 Government Gazette notification request from district/region

After fulfilling all necessary requirements district/regions should send a request for Government Gazette notification to Manager (Corporate Mapping) within Geospatial Technologies Section together with all details to produce the new road declaration plans (if "draft" plans have not already been produced for notification to the local government) or with area based road declaration plans approved by the district/regional director. Also required is a copy of the notification sent to the local government and their response, if any, and any other supporting documentation.

4.5.3.6 Limitation of access and motorway

District/regions need to be mindful of any impacts the proposed change has on any access limitation and motorway declarations if they have been previously declared on the road being re-declared.

4.5.4 Road declaration plan preparation

4.5.4.1 Plan preparation

When preparing new road declaration plans the location of the road is to be identified clearly and concisely. This is done in consultation with district/regions. ARMIS Program Support Coordinators need to be involved as they generally provide advice as to what details are to be included in the declaration e.g. for complex interchanges, details of ramps, roundabouts and carriageways may be included, service roads may be included/excluded etc. Accurate definition of the state-controlled road network is essential for accurate calculation of the value of the department's road asset in the Asset Valuation process and end of year reporting.

Road declaration plans are compiled using the best cadastral and alignment information available at the time.

The department is currently collecting accurate location of the state-controlled roads (Digital Road Network (DRN)) using Geographic Positioning System (GPS) capture technology that provides an accurate location of the road centrelines. This alignment is matched to the latest cadastral information on the Digital Cadastral Data Base (DCDB).

Geospatial Technologies Section is responsible for maintaining the centreline information used across the department. The centrelines are constantly being updated for changes to the DCDB and alignment changes to the state-controlled road network provided by district/regions as part of the DRN update process.

For road declaration plans the location of the road is shown relative to the cadastral boundaries. (see Figures 4.25 to 4.28).

4.5.4.2 Plan size and media

Road declaration plans are to be prepared on a standard A3 size title sheet. For using correct plotting media, suitable for the required presentation standard, refer DDPSM Chapter 2 Section 2.3.4.

4.5.4.3 Plan scales

The scale chosen for the plan should enable it to be easily read. Generally, in rural areas a scale of 1:25000, 1:50000 or 1:100000 (A3) will be satisfactory while in urban areas a scale of 1:5000 or 1:10000(A3) or larger is required.

4.5.4.4 Drafting standard

The type of drafting required on these plans should not differ to any extent from that of the limited access plans, except that only minimal annotations relating to new road declarations are shown to emphasise their location.

4.5.4.5 Typical information required on plans

The following information is to be accurately recorded on the plan:

- the best alignment information and latest cadastral information available using DCDB
- state-controlled road (subject road)
- state-controlled road (other than subject road)
- local government service road
- Transport and Main Roads/Queensland Rail common area if applicable
- each road declaration plan of a group covering any one road or part of a road must bear a reference to the preceding and/or succeeding plan, if any. This reference is to be given in the form "Joins Plan...". It is to be parallel to and against the right and/or left hand borders of the drawing
- rivers and large creeks which should be shown and named
- a north point, and
- a scale bar.

Road declaration plans are also to be given a drawing number from the department's digital plan room system (Geospatial Information Management System) (GIMS). Road declaration plan information must be included into GIMS by your plan room officer.

Highlighting of road declaration areas

In order to clearly identify the area to which road declaration applies, the area should be highlighted with hatching. Areas to which road declaration applies are to be shown using a standard hatch pattern. These patterns are provided by Corporate Mapping Unit within Geospatial Technologies Section. These plans are produced in Mapinfo. (see Appendix 4D).

Appendix 4A: Guide to Autocad hatch patterns for resumption drawings

Hatch Pattern Selection

Basic properties for the hatch patterns to be used are given below.

Land Requirement	Hatch Pattern	Hatch Scale Relative to Paper Space	Angle
Full Resumption	HONEY	20*	90°
Volumetric Resumption	ZIGZAG	16*	90°
Incidental Resumption	ANSI31	10*	90°
Common Area Resumption	Cross	12*	90°
(* - see Hatch Pattern Scaling)			

These hatch patterns are included in the Main Roads Customisation for AutoCAD, where scaling, layering and plotting of the hatch a pattern is automated. The following alternatives are provided for information.

Hatch pattern scaling

The AutoCAD system variable MEASUREMENT controls which hatch pattern file a drawing uses when a hatch is created. The hatch scales shown in the above table are to be used where MEASUREMENT is set to zero (0). The hatch scales should be divided by a factor of 25.4 if MEASUREMENT is set to one (1).

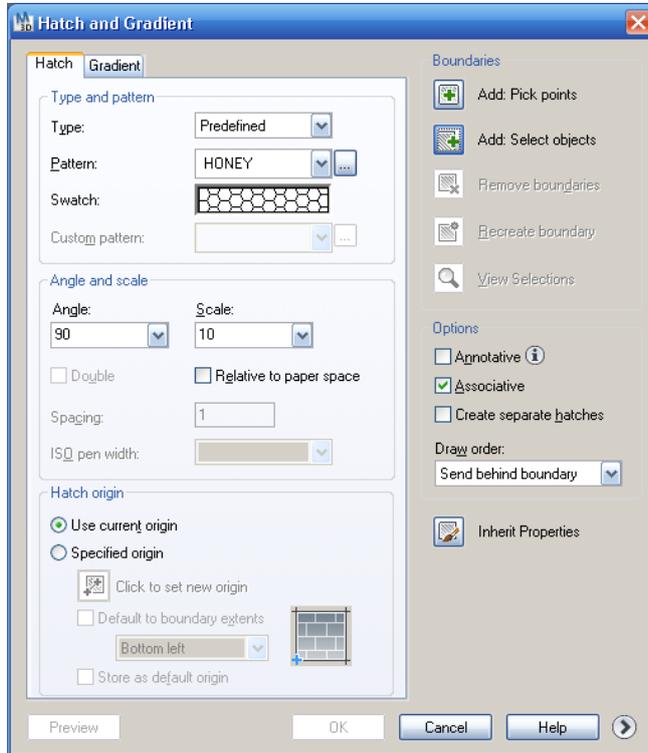
When using the BHATCH command, a hatch pattern can automatically be displayed at a scale appropriate for your layout. First enter the hatch pattern scale from the above table and then select the "Relative to paper space" check box as shown below. This option is only available from Layout space (i.e. the Layout Tab).

For hatching in Model space (i.e. the Model Tab), the following reference may be useful for manual selection of hatch scale:

Example: For Full Resumption hatch where view scale is 1:500 (2.0xp):

View Scale (Units m)	View Scale Relatives to Paper Space	Model Space Hatch Scale Multiplier
1:10000	0.1xp	10
1:5000	0.2xp	5
1:2500	0.4xp	2.5
1:2000	0.5xp	2
1:1000	1.0xp	1
1:500	2.0xp	0.5
1:250	4.0xp	0.25
1:200	5.0xp	0.2
1:100	10.0xp	0.1

Hatch scale in model space	=	Hatch Scale Relative to Paper Space x Multiplier
	=	20 x 0.5
	=	10



Appendix 4B: Guide to Autocad hatch patterns for Native Title drawings

Hatch pattern selection

Basic properties for the hatch patterns to be used are given below

Land/Water Affected	Hatch Pattern	Hatch Scale Relative to Paper Space	Angle
Any	NET	30*	45°
(* -see Hatch Pattern Scaling)			

These hatch patterns are included in the Transport and Main Roads Customisation for AutoCAD, where scaling, layering and plotting of the hatch a pattern is automated. The following alternatives are provided for information.

Hatch pattern scaling

The AutoCAD system variable MEASUREMENT controls which hatch pattern file a drawing uses when a hatch is created. The hatch scales shown in the above table are to be used where MEASUREMENT is set to zero (0). The hatch scales should be divided by a factor of 25.4 if MEASUREMENT is set to one (1).

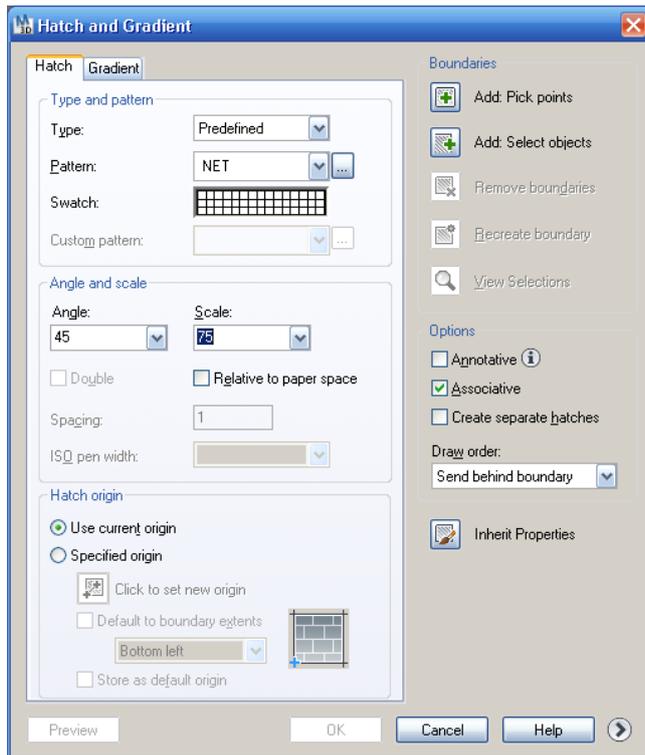
When using the BHATCH command, a hatch pattern can automatically be displayed at a scale appropriate for your layout. First enter the hatch pattern scale from the above table and then select the "Relative to paper space" check box as shown below. This option is only available from Layout space (i.e. the Layout Tab).

For hatching in Model space (i.e. the Model Tab), the following reference may be useful for manual selection of hatch scale:

Example: For Native Title hatch where view scale is 1:2500 (0.4xp).

View Scale (Units m)	View Scale Relatives to Paper Space	Model Space Hatch Scale Multiplier
1:10000	0.1xp	10
1:5000	0.2xp	5
1:2500	0.4xp	2.5
1:2000	0.5xp	2
1:1000	1.0xp	1
1:500	2.0xp	0.5
1:250	4.0xp	0.25
1:200	5.0xp	0.2
1:100	10.0xp	0.1

Hatch scale in model space	=	Hatch Scale Relative to Paper Space x Multiplier
	=	30 x 2.5
	=	75



Appendix 4C: Guide to Autocad hatch patterns for limited access drawings

Hatch Pattern Selection

Basic properties for the hatch pattern to be used are given below:

Hatch Pattern	Hatch Scale Relative to Paper Space	Angle
DOTS	10*	90°
(* -see Hatch Pattern Scaling)		

This hatch pattern is included in the Main Roads Customisation for AutoCAD, where scaling, layering and plotting of the hatch pattern is automated. The following alternatives are provided for information.

Hatch pattern scaling

The AutoCAD system variable MEASUREMENT controls which hatch pattern file a drawing uses when a hatch is created. The hatch scale shown in the above table is to be used where MEASUREMENT is set to zero (0). The hatch scale should be divided by a factor of 25.4 if MEASUREMENT is set to one (1).

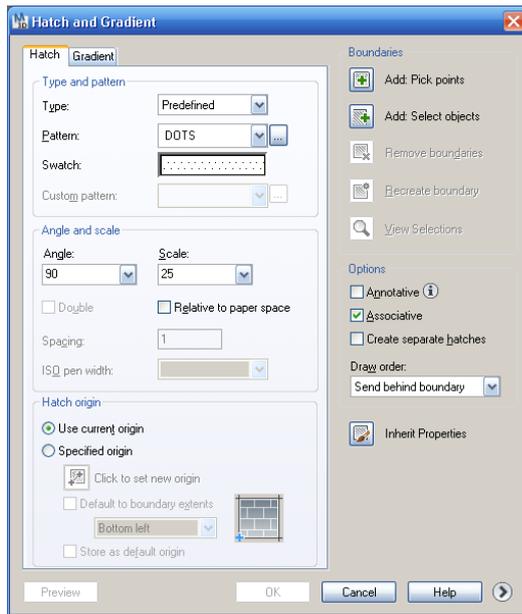
When using the BHATCH command, the hatch pattern can be automatically scaled to the scale appropriate for your layout. First enter the appropriate scale from the above table and then select the Relative to paper space check box as shown below. This option is only available from Layout space (i.e. the Layout Tab).

For hatching in Model space (i.e. the Model Tab), the following reference may be useful for manual selection of hatch scale:

Example: For limited access area where view scale is 1:2500 (0.4xp).

View Scale (Units m)	View Scale Relatives to Paper Space	Model Space Hatch Scale Multiplier
1:10000	0.1xp	10
1:5000	0.2xp	5
1:2500	0.4xp	2.5
1:2000	0.5xp	2
1:1000	1.0xp	1
1:500	2.0xp	0.5
1:250	4.0xp	0.25
1:200	5.0xp	0.2
1:100	10.0xp	0.1

Hatch scale in model space	=	Hatch Scale Relative to Paper Space x Multiplier
	=	10 x 2.5
	=	25



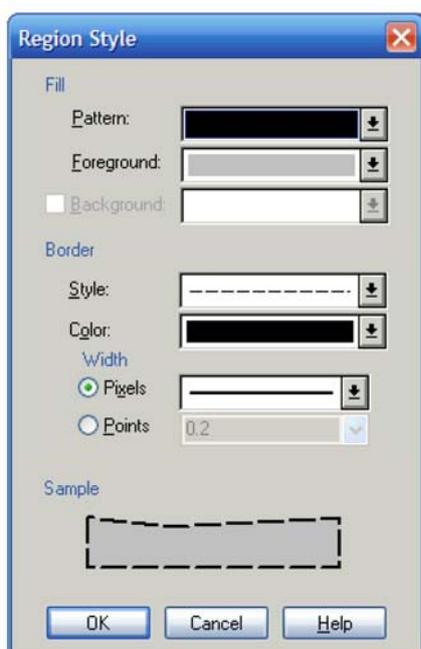
Appendix 4D: Guide to MapInfo patterns for road declaration plans

Area Based Legend - Patterns					
District/region Style	FILL		BORDER		
	Pattern	Foreground	Style	Colour	Width
State-controlled Road (Subject Road)	B1	A5	B2	D1	2 Pixel
State-controlled Road (Other than Subject Road)	B1	A3	B2	A8	2 Pixel
Future State-controlled Road (Subject Road)	C4	F13	B2	F14	2 Pixel
Future State-controlled Road (Other than Subject Road)	C4	F10	B2	F10	2 Pixel
Local Government Service Road	C4	A8	B2	A10	2 Pixel
Common Area	C4	D10	B2	D10	2 Pixel

Centre Line Based Legend - Line Styles			
	Style	Colour	Width
State-controlled Road (Subject Road)	B1	I1	3Pixel
State-controlled Road (New Alignment)	B21	A17	1Pixel
Revoked State-controlled Road Alignment	D1	D12	4Pixel
State-controlled Road (Other than Subject Road)	C1	I1	2Pixel
Local Government Boundary	A2	G12	6Pixel

Pattern Selection

Basic properties for the patterns to be used are given above.



Appendix 4E: List of abbreviations used in land and mining tenures

Land Tenure Abbreviation	Land Tenure Description
AF	Agricultural Farm (Agricultural Selection Class)
AH	Agricultural Homestead (Agricultural Selection Class)
APF	Auction Purchase Freehold
APL	Auction Perpetual Lease
DAS	Designed Agricultural Selection
DL	Development Lease
DSFL	Designed Settlement Farm Lease
F	Freehold (Estate in Fee Simple)
FH (Blinmap – DNR)	Freehold (Estate in Fee Simple)
FGL	Forest Grazing Lease
GF	Grazing Farm (Grazing Selection Class)
GH	Grazing Homestead (Grazing Selection Class)
GHFL	Grazing Homestead Freeholding Lease
GHPL	Grazing Homestead Perpetual Lease
HL	Homestead Lease
HS	Homestead Selection
IL	Informal Lease
L	Leasehold (generic term for Crown Leasehold Land)
LL (Binmap DNR)	Leasehold Land (generic term for Crown Leasehold Land)
MHL	Miners Homestead Lease
MHPL	Miners Homestead Perpetual Lease
NCL	Non-competitive Lease
OL	Occupation Lease
PCL	Perpetual Country Lease
PDH	Pastoral Development Holding
PDS	Prickly Pear Development Selection
PFS	Prickly Pear Frontage Selection
PH	Pastoral Holding
PL	Perpetual Lease
PCL	Perpetual Country Lease
PLPDS	Perpetual lease Prickly Pear Development Selection
PLS	Perpetual Lease Selection (Agricultural Selection)
PPDGF	Prickly Pear Development Grazing Farm

Land Tenure Abbreviation	Land Tenure Description
PPFS	Prickly Pear Freehold Selection
PPH	Preferential Pastoral Holding
PPS	Prickly Pear Selection
PSL	Perpetual Suburban (Allotment) Lease
PTL	Perpetual Town (Allotment) Lease
PTO	Permission to Occupy
PurL	Purchase Lease
R	Reserve (Crown Reserve Land)
RE (Blinmap – DNR)	Reserve (Crown Reserve Land)
RL	Road Licence
SFL	Settlement Farm Lease
SH	Stud Holding
SL (Blinmap – DNR)	State Land
SL	Special Lease
SLPF	Special Lease Purchase Freehold
SNCL	Soldiers Non-competitive Lease
SWAF	Sugar Worker's Agricultural Farm
SW	Sugar Worker's Auction Perpetual Lease
TL (Blinmap – DNR)	Term Lease (previously Special Lease)
US	Unconditional Selection
USL (Blinmap – DNR)	Unallocated State Land (previously Vacant Crown Land)
VCL	Vacant Crown Land
WHFL	Worker's Homes Freeholding Lease
WHPL	Worker's Homes Perpetual Lease
Survey Plan Abbreviation	Survey Plan Description
CNS (DNR)	Cairns (Country of)
CP (DNR)	Crown Plan
DK (DNR)	Drake (Country of)
DW (DNR)	Dawson (Country of)
FN (DNR)	Ferguson (Country of)
GV (DNR)	Grosvenor (Country of)
HT (DNR)	Humbolt (Country of)

Survey Plan Abbreviation	Survey Plan Description
MP (DME)	Mining Plan
PH (DNR)	Pastoral Holding
RP (DNR)	Registered Plan
SP (DNR)	State Plan
TT (DNR)	Talbot (Country of)
W (DNR)	Wodehouse (Country of – pre WHS)
WHS (DNR)	Wodehouse (Country of)
Mining Tenement Abbreviations	Mining Tenement Description
APP or ATP P	Authority to Prospect Petroleum
EPP	Exploration Permit Petroleum
EPPA	Exploration Permit Petroleum Application
EPC	Exploration Permit Coal
EPCA	Exploration Permit Coal Application
EPM	Exploration Permit Minerals
EPMA	Exploration Permit Minerals Application
PP	Prospecting Permit
MC	Mining Claim
ML	Mining Lease
MLA	Mining Lease Application
MDLA	Mining Development Licence
PL	Petroleum Lease
PLA	Petroleum Lease Application
SA	Surface Area
VAC	Vacant Land of Exploration Tenement
MHPL	Miners Homestead Perpetual Lease
MHL	Miners Homestead Lease
GML	Gold Mining Lease
DL	Dredging Lease
MF	Mineral Freehold
MS	Mineral Selection
FA	Furnace Area
MA	Machinery Area

Appendix 4F: List of limited access state-controlled roads (as at October 2013)

ROAD	DESCRIPTION
U12A	South East Arterial Road (Pacific Motorway)
U13C	Gateway Arterial Road (Gateway Motorway - North)
U14	Gympie Arterial Road
U15	Mount Lindesay Arterial Road
U16	Cunningham Arterial Road (Ipswich Motorway)
U18A	Western Arterial Road (Ellen Grove - Jindalee)
U18B	Western Arterial Road (Jindalee - Everton Park)
U19	East - West Arterial Road
U20	Griffith Arterial Road
U94	Albany Creek Sub-Arterial Road
U96	Mogill Sub-Arterial Road
U98	Cleveland Sub-Arterial Road
U99	Redcliffe Sub-Arterial Road
10A-P	Bruce Highway
11A&B	Gold Coast Highway
12A	Pacific Highway (Pacific Motorway)
13A&B	Landsborough Highway
14A&E	Flinders Highway
15A&B	Barkly Highway
16A-D	Capricorn Highway
17A-D	Cunningham Highway
18A-C	Warrego Highway
19A	Isis Highway
20A	Captain Cook Highway
22C	New England Highway
25A	Mount Lindesay Highway
26B&C	Leichhardt Highway
27A-C	Gregory Highway
28A	Gore Highway
32A&B	Kennedy Highway

ROAD	DESCRIPTION
33A&B	Peak Downs Highway
40A&C	D'Aguilar Highway
41C&F	Burnett Highway
42A	Brisbane Valley Highway
45B	Bunya Highway
46A	Dawson Highway
101	Smith Street Connection Road
103	Southport - Burleigh Road
105	Nerang - Broadbeach Road
109	Cleveland - Redland Bay Road
111	Mount Cotton Road
112	Capalaba-Cleveland Road
126	Caboolture - Bribie Island Road
132	Caloundra Road
133	Maroochydore - Noosa Road
136	Maroochydore Road
138	Yandina - Coolum Road
140	Eumundi - Noosa Road
142	Cooroy - Noosa Road
144	Emu Mountain Road
150A&B	Sunshine Motorway
152	Kawana Way
162	Pialba - Burrum Heads Road
163	Maryborough - Hervey Bay Road
164	Torbanlea - Pialba Road
166	Maryborough - Cooloola Road
171	Goodwood Road
172	Elliott Heads Road
174	Bundaberg - Bargara Road
175	Bundaberg - Port Road
176	Bundaberg - Gin Gin Road

ROAD	DESCRIPTION
177	Bundaberg Ring Road
179	Bundaberg - Miriam Vale Road
181	Gladstone - Mt Larcom Road
185	Gladstone - Benaraby Road
188	Bajool - Port Alma Road
196	Rockhampton - Yeppoon Road
197	Western Yeppoon - Emu Park Road
203	Beaudesert - Beenleigh Road
209	Mondoolun Connection Road
401	Brisbane - Woodford Road
450	Gavial - Gracemere Road
478	Maryborough - Biggenden Road
484	Eumundi - Kenilworth Road
492	Kilcoy - Beerwah Road
531	Rockleigh - North Mackay Road
642	Gillies Range Road
643	Malanda - Lake Barine Road
647	Cairns Western Arterial Road
651	Smithfield Bypass (proposed)
811	Portsmith Road
832	North Townsville Road
835	Garbutt – Upper Ross Road
851	Proserpine - Shute Harbour Road
855	Yakapari - Seaforth Road
856	Mackay - Bucasia Road
857	Mackay - Slade Point Road
901	Burpengary Service Road
902	Linkfield Connection Road
905	Pacific Highway Connection Road
910	Centenary Motorway

